

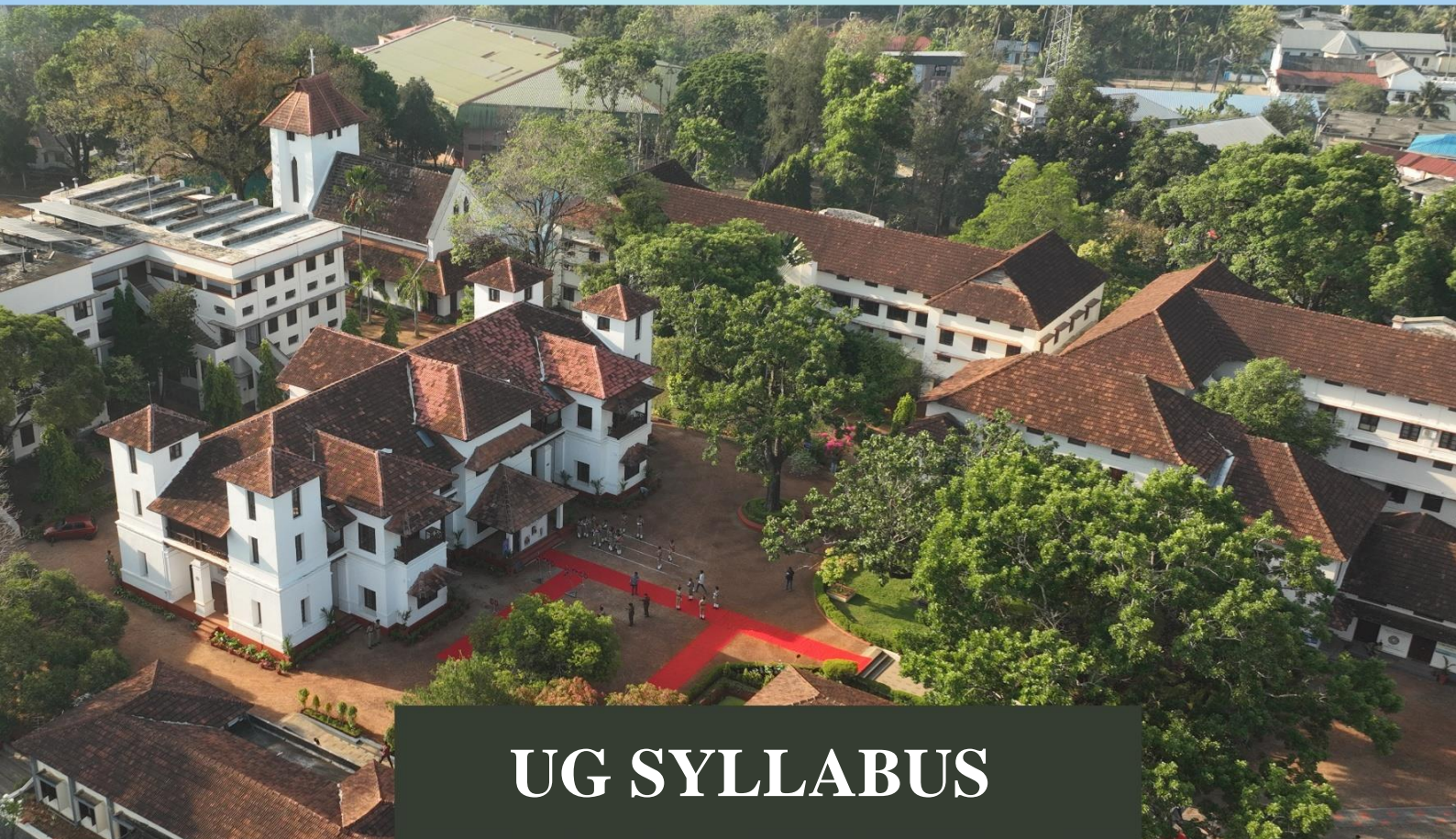


# UNION CHRISTIAN COLLEGE (AUTONOMOUS) ALUVA

Affiliated to Mahatma Gandhi University, Kottayam, India  
NAAC Accredited with A++ Grade in Vth cycle  
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## DEPARTMENT OF ECONOMICS



## UG SYLLABUS

### UNDERGRADUATE (HONOURS) PROGRAMMES {UCC UGP (HONOURS)}

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Adopted from THE MAHATMA GANDHI UNIVERSITY  
UNDER GRADUATE PROGRAMMES  
(HONOURS) SYLLABUS  
MGU-UGP (Honours)  
(2024 Admission Onwards)

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# **UNION CHRISTIAN COLLEGE ALUVA**

## **UNDERGRADUATE PROGRAMMES (HONOURS) SYLLABUS**

**UCC-UGP (Honours)**  
**(2025 Admission Onwards)**



**Faculty : Social Sciences**

Est. in 1921

**BoS: Economics**

**Programme: Bachelor of Arts (Honours) Economics**



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## PREFACE

Union Christian College (Autonomous), Aluva, is pleased to introduce its Undergraduate Programmes (Honours) under the New Curriculum and Credit Framework, 2024. This initiative is in line with the latest reforms by the UGC and the Kerala Higher Education Reforms Commission. The new curriculum not only complies with the guidelines of the National Education Policy (NEP) but also incorporates its principles, ensuring a comprehensive approach that emphasizes academic flexibility, interdisciplinary learning, and the holistic development of students.

The University Grants Commission (UGC) has introduced the Curriculum and Credit Framework for Undergraduate Programmes 2023 (CCFUP), which offers a flexible choice-based credit system, a multidisciplinary approach, and multiple entry and exit options. It defines three primary pathways: (a) 3-year UG Degree, (b) 4-year UG Degree (Honours), and (c) 4-year UG Degree (Honours with Research).

Furthermore, the Kerala Higher Education Reforms Commission has recommended significant reforms for the undergraduate curriculum starting from the 2023-24 academic year. These reforms advocate for the implementation of 4-year undergraduate programmes, aligning Kerala's education system with internationally acclaimed standards.

In response to the Kerala State Curriculum Committee for Higher Education's guidelines, the Kerala State Higher Education Curriculum Framework (KSHECF) for Undergraduate Education has been introduced. Union Christian College, Aluva, following the directives of the Kerala State Higher Education Council, has designed and adopted its own curriculum framework.

An Academic Committee at Union Christian College was formed to implement these regulations, leading to the development of the Union Christian College Undergraduate Programmes (Honours) Regulations, 2025 {UCC-UGP(Honours)} under the New Curriculum and Credit Framework, 2025. These regulations will apply to students admitted from the Academic Year 2024-25 onward. The proposed Four-Year Undergraduate Programme represents a significant shift in structure and methodology compared to the existing curriculum. The current three-year programme will continue until all enrolled students have completed their courses as per the previous regulations.

Est. in 1921  
**Board of Studies, Economics**

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## Syllabus Index

Name of Major: **Economics**

### Semester: 1

Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc	Credit	Hours/ week	Hour Distribution / Week			
					L	T	P	O
UC1DSCECO100	Essentials of Economics - I	<b>DSC A</b>	4	5	3		2	
UC1MDCECO100	Economics and Finance in Everyday Life	<b>MDC</b>	3	4	2		2	

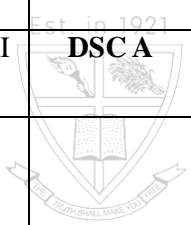
L — Lecture, T — Tutorial, P — Practical/Practicum, O — Others

### Semester: 2



Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc	Credit	Hours/ week	Hour Distribution / Week			
					L	T	P	O
UC2DSCECO100	Essentials of Economics - II	<b>DSC A</b>	4	5	3		2	
UC2MDCECO100	Understanding Indian Economy	<b>MDC</b>	3	4	2		2	


**Semester: 3**

Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc	Credit	Hours/ week	Hour Distribution / Week			
					L	T	P	O
UC3DSCECO200	Microeconomics - I	<b>DSC A</b>	4	4	4			
UC3DSCECO201	Quantitative Economics - I	<b>DSC A</b>	4	5	3		2	
UC3DSEECO200	Introduction to Data Analysis for Economics (Specialisation for Econometrics and Data Analysis)	 <b>DSE*</b>	4	5	3		2	
UC3DSEECO201	Financial Economics (Specialisation for Finance)		4	5	3		2	
UC3DSEECO202	Life Insurance (Specialisation for Insurance)		4	5	3		2	
UC3DSEECO203	Monetary Economics		4	5	3		2	
UC3DSEECO204	Navigating Surveys for Academic and Professional Success		4	5	3		2	
UC3DSEECO205	Economics of Health and Education		4	5	3		2	

UC3DSCECO202	Basics of Fintech Entrepreneurship	<b>DSC B</b>	<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC3MDCECO200	Understanding Global Economy	<b>MDC</b>	<b>3</b>	<b>3</b>	<b>3</b>			
UC3VACECO200	Gender and Economics	<b>VAC</b>	<b>3</b>	<b>3</b>	<b>3</b>			

\*Choose any one course from DSE Basket

**Semester: 4**

Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc	Credit	Hours/ week	Hour Distribution / Week			
					L	T	P	O
UC4DSCECO200	Macroeconomics - I	<b>DSC A</b>	<b>4</b>	<b>4</b>	<b>4</b>			
UC4DSCECO201	Quantitative Economics - II	<b>DSC A</b>	<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC4DSEECO200	Exploring Economic Data Analytical Tools (Specialisation for Econometrics and Data Analysis)	 <p>Est. in 1921 <b>DSE*</b></p>	<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC4DSEECO201	Financial Risk Analysis (Specialisation for Finance)		<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC4DSEECO202	Insurance and Marketing (Specialization for Insurance)		<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC4DSEECO203	Economics of Innovation and Entrepreneurship		<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC4DSEECO204	Agricultural Economics		<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC4DSEECO205	International Finance		<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC4DSCECO202	Basics of Fintech Entrepreneurship	<b>DSC C</b>	<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC4SECECO200	Digital Economy Skills for Enterprise Development	<b>SEC</b>	<b>3</b>	<b>3</b>	<b>3</b>			

UC4VACECO200	Sustainable Development Strategies and Governance	VAC	3	3	3			
UC4INTECO200	Internship (Summer)	INT	2					

\* Choose any one course from DSE Basket

**Semester: 5**

Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc	Credit	Hours/week	Hour Distribution / Week			
					L	T	P	O
UC5DSCECO300	Econometrics -I	DSC	4	5	3		2	
UC5DSCECO301	International Economics	DSC	4	5	3		2	
UC5DSEECO300	Data Analysis for Economics Using Python (Specialisation for Econometrics and Data Analysis)	DSE*	4	4	4			
UC5DSEECO301	Financial Regulation and Supervision (Specialisation for Finance)		4	4	4			
UC5DSEECO302	Actuarial Science and Risk Management in Insurance (Specialisation for Insurance)		4	4	4			
UC5DSEECO303	Digital Economy and Business Transformation		4	4	4			

UC5DSEECO304	Public Economics -I	<b>SEC**</b>	<b>4</b>	<b>4</b>	<b>4</b>			
UC5DSEECO305	Institutional Economics		<b>4</b>	<b>4</b>	<b>4</b>			
UC5DSEECO306	Business Economics		<b>4</b>	<b>4</b>	<b>4</b>			
UC5SECECO300	Security Analysis and Portfolio Management		<b>3</b>	<b>3</b>	<b>3</b>			
UC5SECECO301	Economics of Rural Entrepreneurship		<b>3</b>	<b>3</b>	<b>3</b>			

\* Choose any three courses from DSE Basket

\*\* Choose any one course from SEC Basket

#### Semester 6

Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc	Credit	Hours/ week	Hour Distribution / Week			
					L	T	P	O
UC6DSCECO300	Indian Economy - I	<b>DSC</b>	<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC6DSCECO301	Development Economics -I	<b>DSC</b>	<b>4</b>	<b>4</b>	<b>4</b>			
UC6DSEECO300	Econometrics -II (Specialisation for Econometrics and Data Analysis)	<b>DSE*</b>	<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC6DSEECO301	Fundamentals of Fintech Entrepreneurship (Specialisation for Finance)		<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC6DSEECO302	General Insurance (Specialisation for Insurance)		<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC6DSEECO303	Behavioural Economics		<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	

UC6DSEECO304	Economics of Management and Organizational Behaviour		4	5	3		2	
UC6DSEECO305	Economics of Artificial Intelligence		4	5	3		2	
UC6SECECO300	Integrated Skills for Applied Economics	SEC	3	3	3			
UC6VACECO300	Foundations of Environmental, Social, and Governance (ESG)	VAC	3	3	3			

\* Choose any two courses from DSE Basket.

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**Semester 7**

Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc	Credit	Hours/ week	Hour Distribution / Week			
					L	T	P	O
UC7DCCECO400	Microeconomics - II	DCC	4	5	3		2	
UC7DCCECO401	Macro Economics - II	DCC	4	4	4			
UC7DCCECO402	Mathematical Economics -I	DCC	4	4	4			
UC7DCEECO400	Time Series Econometrics	DSE*	4	4	4			
UC7DCEECO401	Insurance Banking and Financial Services		4	4	4			
UC7DCEECO402	Quantitative Economics -III		4	4	4			
UC7DCEECO403	Public Economics - II		4	4	4			

UC7DCEECO404	Resource Economics and environmental Accounting		4	4	4			
UC7DCEECO405	Research Methodology for Economics		4	4	4			
UC7DSEECO400	Techniques for Fieldwork and Research	<b>DSE**</b>	4	4	4			
UC7DSEECO401	Foundations of Economic Data Analysis		4	4	4			
UC7DSEECO402	Contemporary Economic Policies		4	4	4			
UC7DSEECO403	Artificial Intelligence and the Economy		4	4	4			

\* Choose any three courses from DCE Basket

\*\* This DSE basket is for other disciplines, i.e. learner who are opting economics as their Minor can choose any three courses from this basket.

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### Semester 8

Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc	Credit	Hours/ week	Hour Distribution/ Week			
					L	T	P	O
UC8DCCECO400	Indian Economy- II	<b>DCC</b>	4	5	3		2	
UC8DCCECO401	Development Economics-II	<b>DCC</b>	4	5	3		2	
UC8DCEECO400	Economics of Innovation and Technological Change	<b>DCE*</b>	4	5	3		2	
UC8DCEECO401	Mathematical Economics-II		4	5	3		2	
UC8DCEECO402	Fire and Marine Insurance		4	5	3		2	
UC8DCEECO403	Responsible Publication Ethics in Academic Research		4	5	3		2	



UC8DCEECO404	Kerala Economy: Pattern and Challenges		<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC8DCEECO405	Open Economy Macroeconomics		<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC8DCEECO406	Heterodox Economics		<b>4</b>	<b>5</b>	<b>3</b>		<b>2</b>	
UC8PRJECO400	Project (Honours/ Research)	<b>PRJ</b>	<b>12</b>					



**Recommended Courses (for respective semesters) for Econometrics and Data  
Analysis (ED) Specialisation**


For those colleges choosing the specialisation of Econometrics and Data Analysis (ED), the Board of Studies strongly recommends two specialisation courses at higher difficulty level (300-399) and hence suggests the following combination of courses for this specialisation as ideal; assuming that the students will complete their specialisation courses in the Sixth Semester.

<b>Recommended course combination for Econometrics and Data Analysis(ED)</b>				
	<b>Semester III</b>	<b>Semester IV</b>	<b>Semester V</b>	<b>Semester VI</b>
<b>Course</b>	Introduction to Data Analysis for Economics.	---	Data Analysis for Economics using Python.	Econometrics–II.



# SEMESTER 1



<div>Est. in 1921</div> <div></div>		<div>UNION CHRISTIAN COLLEGE, ALUVA</div>				
Programme	BA(Hons)Economics					
Course Name	Essentials of Economics-I					
Type of Course	DSCA					
Course Code	UC1DSCECO100					
Course Level	100-199					
Course Summary	This course is designed to provide the learners with a comprehensive understanding of the fundamentals of Economics. By exploring the basic principles of economics, students will explore key concepts such as market mechanism, the role of government and the significance of trade. The course also aims at equipping the learners in viewing the real world scenarios and problems from the perspective of Economics.					
Semester	1	Credits			4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical/ Practicum	Others	
		3		1		
Pre-requisites,if any						

### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the students will be able to:</i>	<b>Learning Domains</b> *	<b>PO No</b>
1	Understand some of the basic concepts and principles of economics	U	1,2,3,10
2	Understand how the market mechanism works	U	1,2
3	Analyze the various types of elasticities and their economic implications.	An	1,2,10

4	Evaluate the fundamental ways of government intervention in the market mechanism.	E	1,2
5	Understand the role of trade in an economy	U	1,2,10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Economics–Concepts and Principles</b>		23	
	1.1	Economics: meaning, definition, nature, scope and significance – The twin branches of economics - Microeconomics and Macroeconomics - Conceptual differences–Economic Agents: Consumer–Producer-Government - External Sector - Financial System.	5	1
	1.2	Ten Principles of Economics - How people make decisions?:people face trade-offs–everything comes with a cost–thinking at the margin –people respond to incentives, How people interact?:significance of trade–role of markets – role of government, How the economy works?: standard of living of an economy - general price level and money - the inflation - unemployment trade off.	6	1
	1.3	Scientific method – Economics as a science – Role and nature of assumptions in economics–economic models and the real world – Positive and normative analysis - Difference in scientific judgement and values.	3	1

<b>Practicum:</b>	1. Prepare a chart showing the activities of different economic agents. 2. Draw a map/flowchart that shows the different types of financial institutions working in an economy and their products and services. 3. Design an experiment to study how incentives influence people response (among students or general public). 4. Analyse a case study on how a government intervention (like control on money lenders, sand mining etc) have produced the impact. 5. Prepare a trade-off matrix about career and course selection. 6. Collect photos that reflects the general standard of living of economies that have different level of per capita income. 7. Discussion – on trade off among different economic goals like risk and return, efficiency and equity, development and environment etc. 8. Discussion on relevant hot topics that enables students to understand the concepts of thinking at margin, individual's response to incentives. 9. Discussion on: Positive question: Is lack of skill set the reason or higher youth unemployment in India? Normative Question: Would student migration from Kerala benefit the state in the long run?		9	1
<b>2</b>	<b>Market Mechanism</b>		20	
	2.1	Markets–Interaction between Consumer and Producer–competition - competitive and non-competitive markets	2	2
	2.2	Consumer in the market: Demand–individual and market demand–Demand schedule, equation and curve–Factors affecting demand – Expansion and extension of demand curve- Elasticity of demand: Measurement(point and arc elasticity)–degrees of elasticity-price, income and cross elasticities – determinants of price elasticity of demand – price elasticity and the demand curve	4	2
	2.3	Producer in the Market: Supply–Supply schedule, equation and supply curve–Factors determining supply – Shift in supply curve - Price elasticity of Supply and its measurement - determinants of price elasticity of supply – price elasticity and the supply curve	3	2
	2.4	Market equilibrium and the price mechanism-Changes in market equilibrium – shifts in demand and supply curves	2	2



<b>Practicum</b>	1. Analyse demand for various categories of goods available in the market such as necessities and luxuries. 2. Classroom simulation through role play as consumers and producers deploying different tools -price, advertisement, differentiating the product slightly and giving freebies. 3. Conduct a social survey related to consumer behaviour or a market survey to identify the most demanded vegetables/fruits in the nearby market. 4. Discuss Cases (a) Market for Eggs and Market for College Education in Kerala (b) Wage Inequality in Kerala (c) Covid-19 Pandemic on Demand and Supply of different markets in Kerala like real estate market, labour market, etc. 5. Create a compilation of goods categorized according to the degrees of competition. 6. Visit an active local market (like where production are auctioned, high volume trade is conducted etc.) and prepare a report on the nature of the working of the market. 7. Make a study on ice creams, seasonality, product differentiation, price elasticity, competition through advertisement, selling methods, etc. through a field study.		9	2
<b>3</b>	<b>Efficiency of markets and role of Government</b>		19	
	3.1	Consumer surplus and the demand curve-Producer surplus and the supply curve	3	4
	3.2	Total surplus and the market efficiency–market efficiency and market failure	3	4
	3.3	Demand, Supply and Government Policies: Control on prices–Price ceiling–Price ceiling and market outcome–Price floors and market outcome	2	4
	3.4	Taxes on sellers and market outcome–Taxes on buyers and market outcome - Tax incidence and deadweight losses – The effect of demand and supply elasticities on the tax burden	3	4
<b>Practicum:</b>	1. Discussion–Application of price ceiling in Uber and OLA Services 2. Discussion-Minimum Support Price and its impact on paddy cultivation in Kerala 3. Conduct a survey/Discussion–Increasing tax on alcoholic beverages and its tax impact in Kerala		8	4
<b>4</b>	<b>Trade and the External Sector</b>		<b>13</b>	
	4.1	Determinants of trade–equilibrium without trade–world price and comparative advantage	3	5

	4.2	Winners and losers from trade—gains and losses of the exporting and importing countries – other benefits of international trade	3	5																																								
	4.3	The rationale for trade restrictions—Jobs—National security – Infant industries – Unfair Competition – Bargaining Power	3	5																																								
Practicum	1. Discussion—Major trade partners and the trade mix of India 2. Debate—Free trade versus Protection		4	5																																								
5	Teacher Specific Module																																											
Teaching and Learning Approach	<b>Classroom Procedure(Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities : Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>o CD1-Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>o CD2- Tutorials/Assignments</li><li>o CD3-Class Seminars</li><li>o CD4-Peer group Discussions</li></ul>																																											
Assessment Types	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment(CCA)—30Marks</b> <table><tr><th colspan="4">Components of CCA</th></tr><tr><td colspan="4">Field study, Survey, Report writing, Class Tests</td></tr><tr><td colspan="4">Assignments</td></tr><tr><td colspan="4">Seminar/Viva</td></tr><tr><td colspan="4">Project/Quiz/Book Review.</td></tr></table> <b>B. End Semester Examination(ESE):70 marks; Time 2 hours.</b> <table><tr><th colspan="4">End Semester Examination(ESE)2Hours</th></tr><tr><th>Descriptive type</th><th>Word Limit</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>Short Answer</td><td>30 words</td><td>10 out of 15</td><td>10x2=20</td></tr><tr><td>Short Essay</td><td>150words</td><td>10 out of 15</td><td>10x5=50</td></tr><tr><td colspan="3">Total Marks</td><td>70</td></tr></table>				Components of CCA				Field study, Survey, Report writing, Class Tests				Assignments				Seminar/Viva				Project/Quiz/Book Review.				End Semester Examination(ESE)2Hours				Descriptive type	Word Limit	Number of questions to be answered	Marks	Short Answer	30 words	10 out of 15	10x2=20	Short Essay	150words	10 out of 15	10x5=50	Total Marks			70
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Short Answer	30 words	10 out of 15	10x2=20																																									
Short Essay	150words	10 out of 15	10x5=50																																									
Total Marks			70																																									

## References

1. Mankiw, N.G. (2023). *Principles of economics*. Cengage Learning.

## Suggested Readings:

1. Pindyck, Robert S., Daniel L. Rubinfeld, and Sreejata Banerjee. *Microeconomics*. 9th ed., Pearson, 2020.
2. Stiglitz, Joseph E., and Carl E. Walsh. *Principles of Economics*. W. W. Norton & Co., 2011.
3. Samuelson, Paul A., and William D. Nordhaus. *Economics*. 19th ed., McGraw-Hill Education, 2019.
4. Koutsoyiannis, Apostolos. *Modern Microeconomics*. 2nd ed., Palgrave Macmillan, 2012.
5. Salvatore, Dominick. *Microeconomics Theory and Applications*. 4th ed., Oxford University Press, 2014.



	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>
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<b>Programme</b>						
<b>Course Name</b>	<b>Economics and Finance in Everyday Life</b>					
<b>Type of Course</b>	<b>MDC</b>					
<b>Course Code</b>	<b>UC1MDCECO100</b>					
<b>Course Level</b>	<b>100-199</b>					
<b>Course Summary</b>	<p>Acquiring life skills is an important objective of education. Some of those skills can be provided directly through courses under programmes. The Economics and Finance in Everyday Life is designed to equip the students to take right decisions based on the logic of economics, especially related to finance and management. When acquiring such knowledge and approach, the students can navigate through the life challenging situations so that they emerge as successful individuals. Similarly, the students should be conditioned with right perspective in their decision making responsibility as consumers, citizens, managers and public servants.</p>					
<b>Semester</b>	<b>1</b>	<b>Credits</b>			<b>3</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>	
		<b>2</b>		<b>1</b>		<b>60</b>
<b>Pre- requisites, if any</b>						

#### COURSE OUTCOMES(CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the learner will be able to:</i>	<b>Learning Domains*</b>	<b>PO No</b>
1	Examine the role of different rational and psychological factors in configuring economic and financial decisions.	E	3
2	Understanding time element and other factors influencing investment decisions.	U	2

3	Analyzing financial decisions using different tools like decision matrix, financial ratios etc.	An	9,10
4	Examining the various risk in dealing with financial decisions.	E	9,10
5	Understanding the various methods of secure and stable personal Finance management.	U	7,9
6	Providing an awareness about the risks and opportunities of various personal finance options.	U	7,9
<b>*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation(Ap)</b>			

**COURSE CONTENT**  
**Content for Classroom Transactions(Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Human Behaviour and Economic Decisions</b>		<b>20</b>	
	1.1	Basic concepts related to economic decisions: Scarcity, choices and rational decision making-Importance of choices - Every decision bears a cost: recognising opportunity cost (e.g. making investment in bonds or equities)-Value of informed decisions and the problem of asymmetric information-Rational and emotional factors (features) in decision making-PACED model-Trade-offs in financial decision Making (e.g. between risk and return).	5	1
	1.2	Heuristics, bounded rationality-Risk and uncertainty-Role of different cognitive biases influencing financial and economic decisions.	2	1
	1.3	Mental accounting and financial decisions-Benefits of human capital formation(investing in yourself)and entrepreneurship (working for yourself).	2	1
	1.4	Economics of Happiness-Altruism-Neuroeconomics.	1	2
<b>Practicum</b>	Prepare a brief review of the behavioural factors influencing economic decisions. Analyse the trade off in financial decision making. Design a behavioural case study where bounded rationality influences economic decisions. Prepare a report on how altruism configures modern social approach.		10	2
<b>2</b>	<b>Personal Finance and Economics in the Digital Era</b>		<b>20</b>	

	2.1	Time element and rate of return: Importance of time value of money in assessing future income flows-Rate of return : annual rate of return, real rate of return and expected rate of return-Simple and compound interest.	3	2
	2.2	Features of saving and investment as two financial alternatives- Relationship between inflation, interest rate and savings.	1	5,6
	2.3	Impact of smart phones and digital economy in consumption and investment activities-Impulse buying-Need for the control of addiction and impulse behaviours in consumption and financial decision making-Prospect theory-Use of decision matrix in economic And financial decisions-Preparing decision matrix for financial products using large language models.	3	4
	2.4	Cyber security issues and digital transactions-phishing-social engineering-pharming-Spear phishing-Spoofing-malwares and router security issues – Best cyber security practices including 2FA -Key personal and financial credentials and ensuring their security in the digital world-Money laundering-Ponzi schemes and money chains And the risks involved.	3	4
<b>Practicum</b>	Prepare a decision matrix for bonds and equities with features of return, risk, liquidity and marketability using a large language model. Map out the various risks emanating from cyber world, especially data and privacy risks.		10	4, 5,6
<b>3</b>	<b>Personal Finance and Wealth Management for Economic Management</b>		<b>20</b>	
	3.1	Types of credits: Personal loans, mortgage loans-Digital loans-Triple C in credit: Capacity, Character, Collateral-Problems of over- indebtedness-Calculation of credit score (CIBIL)-Credit report- Building and maintaining a good credit score-KYC norms-Credit cards- Precautions in credit card use.	5	6
	3.2	Need for financial planning and budgeting-Investment : Debt vs equity investment.	1	6
	3.3	Investment in securities market: Procedures for starting equity trading in India-Primary and Secondary market investment-Key ratios for assessing common stocks-Stock market simulators/ virtual/paper trading platforms.	4	6



<b>Practicum:</b>	Prepare a list that determines the credit worthiness of a borrower. Discuss the importance of CIBIL score in personal finance. Examine the key ratios to assess stocks by taking the examples of most important stocks. . Compare and contrast the various factors to be considered while investing in stocks and bonds. Examine how important are KYC norms in the current digital banking context.	10	6
4	<b>Teacher Specific Module</b>		

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> The course covers life related challenges and opportunities. Hence, the teacher can adopt suitable course delivery methods in accordance with the topics. <b>Suggested Course Delivery Methods</b>
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	<ul style="list-style-type: none"><li>• CD1-Lecture methods.</li><li>• CD2-Experience sharing by students and from the general public using the inputs from newspapers and published works.</li><li>• CD3-Demonstration:For digital and cyber security, the services of external resource persons like cyber security can be adopted.</li><li>• CD4-Peer group Discussions.</li><li>• CD5-Student assignments on personal wealth management using <i>paper wealth</i> Allocation and the measurement of its return.</li><li>• CD6-Expert talk :For classes on crypto assets, ponzi scheme etc the services of financial sector experts, government advisories etc. can be used</li><li>• CD7-Role playing as portfolio managers with paper wealth or mock fund allocation.</li><li>• CD8-Identifying and listing of credentials: Instructing the students to prepare a list of the various important personal and financial data credentials and the need to keep them in a secure manner.</li><li>• CD9-Use of computer lab.</li></ul>	
	<p><b>MODE OFASSESSMENT</b></p> <p><b>Continuous Comprehensive Assessment (CCA): 25 Marks</b></p> <p><b>Components of CCA</b></p> <table border="1"><tr><td>Class Test, Mini Project: on addiction in consumption/investment(or similar topics), questionnaire based mini project (for topics like impulse buying and emotional buying) (both projects can be done with industry collaboration), Industry Expert Interaction Report, Chart/Work book/Other specific assessment/open book test, Seminar/Assignment.</td></tr></table>	Class Test, Mini Project: on addiction in consumption/investment(or similar topics), questionnaire based mini project (for topics like impulse buying and emotional buying) (both projects can be done with industry collaboration), Industry Expert Interaction Report, Chart/Work book/Other specific assessment/open book test, Seminar/Assignment.
Class Test, Mini Project: on addiction in consumption/investment(or similar topics), questionnaire based mini project (for topics like impulse buying and emotional buying) (both projects can be done with industry collaboration), Industry Expert Interaction Report, Chart/Work book/Other specific assessment/open book test, Seminar/Assignment.		

<b>Assessment Types</b>	<b>B. End Semester Examination (ESE): 50marks;Time1hour and 30 minutes.</b>			
	<b>End Semester Examination (ESE) 1Hour and 30minutes</b>			
	<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	30 words	10 out of 15	10x2=20
	Short Essay	150words	6 out of 10	6x5=30
	<b>Total Marks</b>			<b>50</b>

### References


1. Housel,Morgan.ThePsychologyofMoney.JaicoPublishingHouse,2020.
2. Harford,Tim.TheUndercoverEconomist.Abacus,2007.
3. Kahneman,Daniel.Thinking,FastandSlow.Penguin,2015.
4. Rodrik,Dani.EconomicsRules:TheRightsandWrongsoftheDismalScience.W.W.Norton& Company, 2016.
5. Dixit,AvinashK.,andBarryJ.Nalebuff.ThinkingStrategically:TheCompetitiveEdgein Business, Politics, and Everyday Life. W. W. Norton & Company, 2018.
6. Acemoglu,Daron,JamesA.Robinson,andSimonJohnson.WhyNationsFail:TheOriginsof Poverty and Prosperity. Random House Trade Paperbacks, 2013.
7. Graham,Benjamin.TheIntelligentInvestor.HarperBusiness,2005.
8. Dhami,Sanjit.TheFoundationsofBehavioralEconomicAnalysisVolIP:VolumeI:Behavioral Economics of Risk, Uncertainty, and Ambiguity Oxford University Press, 2019.
9. Plagnol,Anke,andPhilipCorr.BehaviouralEconomics:TheBasics.Routledge,2023.
10. RajivKTayal,ArtofHandlingMoneyandInvestments:ApracticalguidetoPersonal Finances,Atlantic Publishers and Distributors (P) Ltd, 2023.
11. JohnS.Hammond,RalphL.Keeney,andHowardRaiffa,SmartChoices:APracticalGuideto Making Better Decisions, Harvard Business Review Press, 2015.
12. JacintaChan,FinancialTimesGuidestoTechnicalAnalysis:Howtotradelikeaprofessional, Financial Times Publishing, 2011.
13. RichardDWyckoff,HowITradeandInvestinStocksandBonds,MartinoFineBooks,2011.
14. ApurvaParikh,SecretstoimproveyourCIBILScore,Kindle,2021.
15. MayurJariwala,TheCyberSecurityRoadmap:AComprehensiveGuidetoCyberThreats,Cyber Laws and Cyber Security Training for a Safer Digital World, Kindle, 2023.
16. DaveRamsey,TheTotalMoneyMakeover:AProvenPlanforFinancialFitness,ThomasNelson Publishers, 2024.

### Suggested Readings:

1. Harari,YuvalNoah.Sapiens:ABriefHistoryofHumankind.HarperPerennial,2015.
2. Kiyosaki,RobertT.RichDadPoorDad:WhattheRichTeachTheirKidsAboutMoney-That the Poor and Middle Class Do Not!. Plata Publishing, 2017.
3. AStandardPersonalFinanceCurriculum,FederalReserveBanksofAtlantaandSt.Louis,2020.

# SEMESTER-2



<div>Est. in 1921</div> <div></div>		<div>UNION CHRISTIAN COLLEGE, ALUVA</div>						
Programme		BA(Hons)Economics						
Course Name		Essentials of Economics– II						
Type of Course		DSCA						
Course Code		UC2DSCECO100						
Course Level		100-199						
Course Summary		This course offers a foundational exploration of economic concepts and certain contemporary issues. Through this course, learners gain a practical understanding of economic principles and methodologies, enabling them to comprehend real-world economic dynamics. The course also enables the learner to understand the basic structure of an economy and its important components.						
Semester		2		Credits		4	Total Hours	
Course Details		Learning Approach		Lecture	Tutorial	Practical/ Practicum		Others
				3		1		75
Pre-requisites, if any								

### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b>	<b>Learning Domains*</b>	<b>PO No</b>
1	Understand the basic concepts related to economics and human nature.	U	6,7,8, 10,
2	Understand the role of time in economic decisions.	U	1,2,10
3	Examine the role of information in economic decision making.	An	1,2
4	Examine the significance of social behavior and instincts in economic decision making.	C	1,2,3
5	Understand the structure of financial system in an economy	U	1,2,3
6	Understand the fundamental ideas of macroeconomics	U	1,2,3
*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation(Ap)			

**COURSECONTENT**  
**Content for Classroom Transactions (Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Foundations of Economic Behaviour</b>		<b>13</b>	
	1.1	Rationality in Economics–Different views of Human Nature: Classical, Neo Classical and Behavioural.	3	1
	1.2	Economic decisions: role of time–emotions-constraints and information – influential factors – Self-interest and altruism – the neuroeconomics perspective	4	2
<b>Practicum:</b>	1. Play a Rationality game in the classroom 2. Discussion: Why do people give tips at restaurants? Is it necessary? Conduct an open classroom poll and discuss 3. Discussion: the nature of human beings (Self-interest versus altruistic behaviours).		6	2
<b>2</b>	<b>Economics of Information and Social Economics</b>		<b>23</b>	
	2.1	Asymmetric information - Adverse selection (Used car market and Insurance market) – Market solution to adverse selection: Signaling – Moral Hazard (Labour market and Insurance market) – Government policy in the world of asymmetric information.	7	3
	2.2	The Economics of Charity and fairness – The economics of revenge and trust – How others influence our decisions – Where do our preferences come from – The economics of peer effects– Following the Crowd: Herding - Cooperation, negotiation, conflicts of interest, and social norms.	6	4
<b>Practicum:</b>	1. Discussion: Adverse selection issue in the used car/mobile phone market and suggest ways to overcome it] 2. Analyse demand for various categories of goods available in the market such as necessities and luxuries. 3. Conduct a social survey related to consumer behavior or conduct a market survey to identify the most demanded vegetables/fruits in the nearby market. 4. Discussion: Why do People give Charity? Play a trust/cooperation game in the classroom. 1. Play an ultimatum game in the classroom.		10	3,4
<b>3</b>	<b>Financial System and its components</b>		<b>18</b>	
	3.1	Role of financial system in an economy–Formal and informal sector-Components of financial system : institutions, markets, instruments and services(overview only)	4	5
	3.2	Banking and Non–Banking Institutions-Role of the Central Monetary Authority (overview only)	3	5

	3.	Financial Markets–Primary and secondary markets–money market and capital market-Stock Exchanges(overview only)	2	5				
	3.	Financial Instruments–money market instruments–capital market instruments(overview only)	1	5				
<b>Practicum:</b>	1.	Discussion on the Indian Financial system and its structure						
	2.	Illustrate how trading happens in stock exchanges	8	5				
	3.	Discuss how the money market and capital market has evolved in India over the past few decades						
<b>4</b>	<b>Economy as a whole–Macroeconomics</b>		<b>21</b>					
	4.1	Circular flow in the economy – National Income, expenditure and Output – Methods of measuring National Income – Aggregate Demand, Aggregate Supply and the macroeconomic equilibrium(basic concepts only)	5	6				
	4.2	National Income Concepts: GDP and its components- GNP- NDP-NNP, Factor Cost and Market Price	4	6				
	4.3	Cost of living–measurement–PPI and CPI-GDP deflator– Real, nominal interest rate and inflation - unemployment(concept only)	4	6				
	4.4	Fiscal and Monetary Policy–Instruments(a general overview)	2	6				
<b>Practicum:</b>	1.	Discussion–Practical difficulties of measuring national income in the context of own labour, housewife services etc.						
	2.	Identify and discuss the experiences of high inflation and its consequences on different nations.	6	6				
	3.	Discussion–Dearness Allowance and inflation						
<b>5</b>	<b>Teacher Specific Module</b>							
<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning :Traditional lectures can provide solid factual knowledge Active-interactive learning, brain storming, seminar, group activities : Foster student engagement through interactive class discussions <b>Course Delivery Methods</b> <ul style="list-style-type: none"><li>o CD1-Lecture by use of boards/LCD projectors/ Projector setc.</li><li>o CD2- Tutorials/Assignments</li><li>o CD3-Class Seminars</li><li>o CD4-Peer group Discussions</li></ul>							
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA)–30Marks</b> <table><tr><td colspan="2"><b>Components of CCA</b></td></tr><tr><td colspan="2">Class Tests</td></tr></table>				<b>Components of CCA</b>		Class Tests	
<b>Components of CCA</b>								
Class Tests								



	Assignments
	Seminar/Viva
	Project/Practicum/Quiz/Book Review/Field work etc.
<b>B. End Semester Examination (ESE):70 marks ; Time 2 hours.</b>	

End Semester Examination (ESE) 2 Hours			
Descriptive type	Word Limit	Number of questions to be answered	Marks
Short Answer	30 words	10 out of 15	10x2=20
Short Essay	150words	10 out of 15	10x5=50
<b>Total Marks</b>			<b>70</b>

#### Reference

1. Mankiw, N.G. Principles of Microeconomics. Cengage India, 2018.
2. Goodwin, Neva et al. Microeconomics in Context. Routledge, 5th ed., 2021. Chapter 7 Link: [https://www.bu.edu/eci/files/2019/05/MIC\\_3e\\_Ch7.pdf](https://www.bu.edu/eci/files/2019/05/MIC_3e_Ch7.pdf)
3. Acemoglu, Daron et al. Economics. Pearson, 2019. Free eBook Link: <https://www.yumpu.com/en/document/read/65840393/daron-acemoglu-david-laibson-john-a-list-economics-pearson-international>
4. The CORE Project. The Economy. CORE, 2016. Free eBook Link: <https://core-econ.org/the-economy/v1/index.html>
5. V Pathak, B. (2018). *Indian Financial System* (5th ed.). Pearson.
6. Mankiw, N.G. (2022). *Principles of Macroeconomics* (8th ed.). Cengage.

	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>
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<b>Programme</b>						
<b>Course Name</b>	<b>Understanding Indian Economy</b>					
<b>Type of Course</b>	<b>MDC</b>					
<b>Course Code</b>	<b>UC2MDCECO100</b>					
<b>Course Level</b>	<b>100-199</b>					
<b>Course Summary</b>	This course offers a comprehensive overview of the Indian economy, covering diverse areas such as the banking sector, financial systems, public finance, and development issues pertinent to both the Indian and Kerala economies. It is designed to prepare students for various competitive examinations by providing them with a solid understanding of key economic concepts and principles. With a dynamic approach, the course integrates factual information and current affairs, ensuring students stay abreast of the latest developments and trends in the Indian economy.					
<b>Semester</b>	<b>2</b>	<b>Credits</b>			<b>3</b>	<b>Total Hours</b>
		<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>	
<b>Course Details</b>	<b>Learning Approach</b>	<b>2</b>		<b>1</b>		<b>60</b>
<b>Pre-requisites, if any</b>						

#### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the students will be able to:</i>	<b>Learning Domains*</b>	<b>PO No</b>
1	Define the basic concepts of National Income, measures of Money Supply and types of inflation, bank rates, recommendations of banking committees and digital economy components.	K	1,2,9,10

2	List out money and capital market Instruments, regulatory bodies and credit rating agencies in financial markets.	K	1,2,9
3	Label the sources of revenue and expenditure and relate Current budget components.	K	1,2
4	Recall the development indices and demographic characteristics of India.	K	1,2,7
5	Explain the performance of agriculture, Industry and service sector of India	U	1,2,6,9,10
6	Relate Kerala economy to the performance of the Indian Economy.	U	1,2,6,9,10
<b>*Remember(K),Understand(U),Apply(A),Analyse(An),Evaluate(E),Create(C),Skill(S),Interest (I)and Appreciation(Ap)</b>			

**COURSE CONTENT**  
**Content for Classroom Transactions (Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Basic Concepts</b>		<b>20</b>	
	1.1	Basic national income concepts: GDP, GNP, Per Capita Income- Sectoral Composition of Income: Primary, Secondary and Tertiary Sectors in the Indian context.	2	1
	1.2	India's demographic profile and features-demographic dividend- HDI,IHDI-SDG-Multi dimensional Poverty Index- Happiness Index- Incidence of poverty in India.	2	1
	1.3	Money and Central Banking: Functions of RBI- Monetary Policy- e Rupee.	2	2
	1.4	Price level and its management-Inflation : types-deflation-reflation- stagflation- Measurement of inflation: WPI and CPI-Anti inflationary measures.	2	3
	1.5	Environment and Climate Change : India's Net Zero Commitment- Energy Transition in India- Renewable Energy Targets- Carbon credit and Carbon tax-COP 28.	2	1
<b>Practicum:</b>	1. Prepare a report on the latest Annual Monetary Policy Statement of the RBI. 2. Discuss the different measures of inflation in India and their relevance. 3. Energy transition and emission reduction programmes in India.		10	1
<b>2</b>	<b>Financial System and Trade</b>		<b>20</b>	
	2.1	Financial Market in India -Money and Capital Market-Structure and instruments of India's capital market-Stock Exchanges and Indices in India-SEBI-NSDL, CDSL, GIFT IFSC.	2	4

	2.2	Structure of India's Banking System-Commercial Banks including Payment Banks and SFBs-Regulation and Supervision of the Banking System by the RBI.	2	4
	2.3	Digital Payment system in India-UPI's ecosystem- role of NPCI.	2	4
	2.4	Key Concepts of Balance of Payments-Current Account and Capital Account-Exchange rate movements: Depreciation and Appreciation- India's current Balance of Payment Situation-Different types of capital flows - Foreign Exchange Reserves.	3	4
	2.5	Composition and direction of India's Foreign Trade.	1	4
<b>Practicum</b>	1. Enlist the various money market and capital market instruments in India. 2. Give an outline of the structure of India's banking system. 3. Mention the major trade partners of India and list the major export and import items of India.		10	6
<b>3</b>	<b>Budget Policy</b>		<b>20</b>	
	3.1	Fiscal Policy: meaning and significance-Major central government taxes-Personal income Tax and Corporate Income Tax- Features of GST-GST Council.	3	5,6
	3.2	The central government budget-major receipts and expenditures of the central government-important indicators in the budget and their implications-Finance Commission.	3	5
	3.3	Public Expenditure in India-FRBM Act-Public Debt.	2	5,6
	3.4	Kerala Economy-features-Challenges and prospects-the fiscal situation in Kerala.	2	5,6
<b>Practicum:</b>	1. Discuss the latest Union and State budgets. 2. List the major taxes of the Union government. 3. Conduct a discussion on Kerala's development prospects.		10	6
<b>4</b>	<b>Teacher Specific Module</b>			

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b>  Classroom Lectures and Authentic Learning :Traditional lectures can provide solid factual knowledge  Active-interactive learning, brainstorming, seminar, group activities : Foster student engagement through interactive class discussions  <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"> <li>• CD1-Lecture by use of boards/LCD projectors / Projectors etc.</li> <li>• CD2- Tutorials/Assignments</li> </ul>
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	<ul style="list-style-type: none"><li>• CD3-Class Seminars</li><li>• CD4-Peer group Discussions</li></ul>																			
Assessment Types	<b>MODE OF ASSESSMENT</b> <b>Continuous Comprehensive Assessment(CCA):25Marks</b> <table><tr><th>Components of CCA</th></tr><tr><td>Class Test-I</td></tr><tr><td>Chart/Workbook/Other specific assessments/</td></tr><tr><td>Seminar/Assignment.</td></tr></table>	Components of CCA	Class Test-I	Chart/Workbook/Other specific assessments/	Seminar/Assignment.															
	Components of CCA																			
	Class Test-I																			
	Chart/Workbook/Other specific assessments/																			
	Seminar/Assignment.																			
<b>B.End Semester Examination (ESE): 50marks; Time 1 hour and 30 minutes.</b>																				
<table><tr><th colspan="4">End Semester Examination (ESE) 1 Hour and 30 minutes</th></tr><tr><th>Descriptive type</th><th>Word Limit</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>Short Answer</td><td>30 words</td><td>10 out of 15</td><td>10x2=20</td></tr><tr><td>Short Essay</td><td>150words</td><td>6 out of 10</td><td>6x5=30</td></tr><tr><td colspan="3">Total Marks</td><td>50</td></tr></table>	End Semester Examination (ESE) 1 Hour and 30 minutes				Descriptive type	Word Limit	Number of questions to be answered	Marks	Short Answer	30 words	10 out of 15	10x2=20	Short Essay	150words	6 out of 10	6x5=30	Total Marks			50
End Semester Examination (ESE) 1 Hour and 30 minutes																				
Descriptive type	Word Limit	Number of questions to be answered	Marks																	
Short Answer	30 words	10 out of 15	10x2=20																	
Short Essay	150words	6 out of 10	6x5=30																	
Total Marks			50																	

### References


1. Mankiw,N.Gregory.*PrinciplesofMacroeconomics*.CengageIndia,2022.
2. Sundharam,K.P.M.*Banking:Theory,LawandPractice*(Recentedition)..SultanChandand Sons, New Delhi, 2019.
3. Musgrave,RichardA.,andPeggyB.Musgrave.*PublicFinanceinTheoryand Practice*. McGraw-Hill, 1989.
4. Bhatia,H.L.*PublicFinance*(30thed.).VikasPublishingHousePvt.,NewDelhi,2020.
5. Meier,GeraldM.*LeadingIssuesinEconomicDevelopment*.OxfordUniversityPress,New Delhi, 2005.
6. Datt,Gaurav,andAmitavaMahajan.*IndianEconomy*.S.Chand&Co.,NewDelhi,2015.
7. Misra,S.K.,andV.K.Puri.*IndianEconomy*(41sted.).HimalayaPublishing House, Mumbai, 2023.
8. Dhingra,I.C.*IndianEconomy*.SultanChand&Co.,NewDelhi,2018.
9. MinistryofFinance,GovernmentofIndia.*EconomicSurvey(CurrentYear)*.
10. KeralaStatePlanningBoard.*KeralaEconomicReview(CurrentYear)*.

### SUGGESTED READINGS

1. <https://censusindia.gov.in/census.website/>
2. <https://www.indiabudget.gov.in/>
3. <https://www.rbi.org.in/>
4. <https://pib.gov.in/PressReleasePage.aspx?PRID=1707203>

# SEMESTER 3



<div>Est. in 1921</div> <div></div>		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>	<b>BA(Hons)Economics</b>					
<b>Course Name</b>	<b>Microeconomics-I</b>					
<b>Type of Course</b>	<b>DSCA</b>					
<b>Course Code</b>	<b>UC3DSCECO200</b>					
<b>Course Level</b>	<b>200-299</b>					
<b>Course Summary</b>	This course provides essential tools for analysing how scarcity influences decision- making, ranging from personal budgeting to corporate profit maximization. Explore the dynamic relationship between supply and demand, investigating the forces that determine prices and resource distribution. Through the examination of real-world examples such as market competition, government policies, and external factors, learners will enhance critical thinking and problem-solving abilities. This course empowers learners to make informed decisions as a citizen and effectively navigate economic challenges in their Every day lives.					
<b>Semester</b>	<b>3</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>	
		<b>4</b>				
<b>Pre-requisites,if any</b>						

#### COURSE OUTCOMES(CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the learner will be able to:</i>	<b>Learning Domains</b> *	<b>PO No</b>
1	Application of microeconomic concepts to analyse real-life situations	A,K,U	2,4,10

2	Develop the fundamentals of production and cost in the economy	A,E,U	1,2,4,10
3	Distinguish different market forms existing in the economy	An, E, Ap	2,4,10
4	Develop economic tools to analyze the economic policies in daily life	C,A,U	1,2,8,10
<b>*Remember(K),Understand(U),Apply(A),Analyse(An),Evaluate(E),Create(C),Skill(S),Interest(I)and Appreciation(Ap)</b>			

**COURSE CONTENT**  
**Content for Classroom Transactions(Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Analysing Consumers Equilibrium</b>		<b>15</b>	
	1.1	Indifference Curve-Properties-MRS-Budget Line-Price Line-Consumer's Equilibrium-Price Consumption Curve-Income ConsumptionCurve-GiffenGoods.	5	1
	1.2	Decomposition of price effect into income and substitution effect: Hicks - Limitations of indifference curve analysis - Weak and strong ordering -Revealed preference theorem.	7	1
	1.3	New approaches to Consumer theory-Pragmatic approach and Linear expenditure system (Concepts only)	3	1
<b>2</b>	<b>ProducersEquilibriumandTheoryofCosts</b>		<b>15</b>	
	2.1	Isoquant - Properties – MRTS - Iso cost Line - Optimal Input combination-Producer Equilibrium-Expansion Path-Ridge Line.	8	2
	2.2	TraditionalTheoryofCost:Short run and long-run cost curves– Modern theory of Cost.	7	2
<b>3</b>	<b>MarketStructure</b>		<b>15</b>	
	3.1	Perfect Competition–Features-Long run and short run equilibrium– Shutdown point – Monopoly - Short run and long run equilibrium - Price discrimination - Degrees and types under monopoly - Dumping.	9	3
	3.2	Bilateral Monopoly (concepts only) – Monopsony - (concept only) - Comparison between Perfect Competition and Monopoly.	6	3
<b>4</b>	<b>ContemporaryMarketStructure</b>		<b>15</b>	
	4.1	Monopolistic Competition-Features-Short and Long run equilibrium.	5	4
	4.2	Oligopoly-Features-Sweezy model-Duopoly(Conceptonly)-Cartel and price leadership (concepts only).	5	4
	4.3	Welfare Economics-Nature and scope- Pareto Optimality Criterion- NewWelfare Economics-EdgeworthBox-Exchange Contract Curve.	5	4
<b>5</b>	<b>TeacherSpecificModule</b>			




Teaching and Learning Approach	<p><b>Classroom Procedure (Mode of transaction)</b></p> <p>Classroom Lectures and Authentic Learning:Traditional lectures can provide solid factual knowledge</p> <p>Active-interactive learning,brainstorming,seminar,group activities:Foster student engagement through interactive class discussions</p> <p><b>Suggested Course Delivery Methods</b></p> <ul style="list-style-type: none"><li>• CD1-Lecturebyuseofboards/LCDprojectors/Projectorsetc.</li><li>• CD2- Tutorials/Assignments</li><li>• CD3-Class Seminars</li><li>• CD4-Peer group Discussions</li></ul>																				
Assessment Types	<p style="text-align: center;"><b>MODE OFASSESSMENT</b></p> <p><b>A. Continuous Comprehensive Assessment(CCA)–30Marks</b></p> <table><tr><td colspan="4"><b>Components of CCA</b></td></tr><tr><td colspan="4">ClassTests</td></tr><tr><td colspan="4">Assignments</td></tr><tr><td colspan="4">Seminar/Viva</td></tr><tr><td colspan="4">Project/Practicum/Quiz/BookReview/Fieldworketc</td></tr></table>	<b>Components of CCA</b>				ClassTests				Assignments				Seminar/Viva				Project/Practicum/Quiz/BookReview/Fieldworketc			
	<b>Components of CCA</b>																				
	ClassTests																				
	Assignments																				
	Seminar/Viva																				
Project/Practicum/Quiz/BookReview/Fieldworketc																					
	<p style="text-align: center;"><b>B. End Semester Examination(ESE)–70marks.</b></p> <p><b>B.End Semester Examination (ESE):70marks;Time2hours.</b></p> <table><tr><td colspan="4"><b>End Semester Examination (ESE)2Hours</b></td></tr><tr><td><b>Descriptive type</b></td><td><b>Word Limit</b></td><td><b>Number of questions to be answered</b></td><td><b>Marks</b></td></tr><tr><td>Short Answer</td><td>30 words</td><td>10 out of 15</td><td>10x2=20</td></tr><tr><td>Short Essay</td><td>150 words</td><td>10 out of 15</td><td>10x5=50</td></tr><tr><td colspan="3"><b>Total Marks</b></td><td><b>70</b></td></tr></table>	<b>End Semester Examination (ESE)2Hours</b>				<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>	Short Answer	30 words	10 out of 15	10x2=20	Short Essay	150 words	10 out of 15	10x5=50	<b>Total Marks</b>			<b>70</b>
<b>End Semester Examination (ESE)2Hours</b>																					
<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>																		
Short Answer	30 words	10 out of 15	10x2=20																		
Short Essay	150 words	10 out of 15	10x5=50																		
<b>Total Marks</b>			<b>70</b>																		

#### Reference

1. Koutsoyiannis, Apostolos. *Modern Microeconomics*. Palgrave Macmillan, 1979.
2. Salvatore, Dominic. *Microeconomic Theory and Applications*. 4th ed., Oxford University Press, 2006.
3. Pindyck, Robert S., Daniel L. Rubinfeld, and David N. Weil. *Microeconomics*. Recent ed., Pearson Education India, 2018.
4. Maddala, G. S., and Ellen E. Miller. *Microeconomics: Theory and Applications*. Tata McGraw-Hill Education, 2004.
5. Case, Karl E., and Ray C. Fair. *Principles of Economics*. 8th ed., Pearson Education India, 2007.
6. Varian, Hal R. *Intermediate Microeconomics: A Modern Approach*. 7th ed., W. W. Norton & Company, 2014.
7. Watson, John, and Wally J. Getz. *Price Theory and Its Uses*. 5th ed., AITBS Publishers Distributors Pvt. Ltd., 2004.
8. Schaum's Outline of Microeconomics. 4th ed., McGraw-Hill Education, 2009.

#### Suggested Readings:

1. Sen, Amartya. *Microeconomics: Theory and Applications*. Oxford University Press, 1999.

		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>	<b>BA(Hons)Economics</b>					
<b>CourseName</b>	<b>Quantitative Economics-I</b>					
<b>Type of Course</b>	<b>DSCA</b>					
<b>CourseCode</b>	<b>UC3DSCECO201</b>					
<b>CourseLevel</b>	<b>200-299</b>					
<b>Course Summary</b>	This course is designed to equip learners with the fundamentals of mathematics used in Economic analysis.The course also aims to enable the learners in thinking and designing economic relations mathematically.					
<b>Semester</b>	<b>3</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>CourseDetails</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>	
		<b>3</b>		<b>1</b>		
<b>Pre-requisites, if any</b>						

#### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the students will be able to:</i>	<b>Learning Domains*</b>	<b>PO No</b>
1	Understand the fundamental concepts of mathematics.	U	1
2	Understand the significance of mathematical approach in economic analysis.	U	3
3	Evaluate real life problems and formulate these into simple mathematical problems.	E	2,10
4	Apply the fundamental mathematical tools in finding solutions to simple problems in economics.	A	2
5	Solve simple mathematical problems that address issues in economics	C	1
<b>*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation(Ap)</b>			

**COURSECONTENT**  
**Content for Classroom Transactions (Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Fundamental mathematics for Economic Analysis</b>		<b>20</b>	
	1.1	Basic concepts: variables, constants, parameters, equations, exponents and logarithm	2	1
	1.2	Set theory-types of sets-set operations–Venn diagrams.	4	1
	1.3	Relations and Functions: types - Linear and Quadratic, exponential and logarithmic - Graphs of these functions – Some general functions in economics (Utility, Production, Cost, Revenue, Profit, Demand, Supply, Consumption, Investment)	4	1
	1.4	Solution to system of equations up to two unknowns – Examples in economics (Market model, Simple Keynesian model)	2	5
<b>Practicum:</b>	1. Debate on the usefulness of mathematics for economic analysis 2. Discussion after comparing functional relationships in sciences (from the school level science courses) and economics 3. Discussion after plotting different types of functions		8	1
<b>2</b>	<b>Fundamentals of Probability</b>		<b>14</b>	
	2.1	Probability: Concepts (Random experiments, sample space, events)	2	2
	2.2	Rules of probability (addition and multiplication theorem)	2	2
	2.3	Conditional probability and its properties	2	2
<b>Practicum</b>	1. Use the coin tossing experiment to explain the concepts 2. Use a pack of cards and make students understand how probability can be used 3. Use the dice rolling experiment and make them understand the concept of conditional probability		8	2
<b>3</b>	<b>Fundamentals of Linear Algebra</b>		<b>20</b>	
	3.1	Matrices, types and fundamental operations–addition, subtraction and multiplication	4	1,2
	3.2	Elementary operations on a matrix–transpose of a matrix	2	1,2
	3.3	Determinants (upto 3x3) and its properties	2	1,2
	3.4	Minor, Cofactor and Adjoint of a Matrix	2	2
	3.5	Inverse and its properties	2	4
	3.6	Solutions of simultaneous equations using Cramer's Rule – Examples from economics (two commodity market model, national income model)	3	5
<b>Practicum</b>	1. Discuss the Input–Output model and its importance		5	3
<b>4</b>	<b>Basic Calculus for Economics</b>		<b>21</b>	

	4.1	Limits &Continuity (Concept only)	1	1					
	4.2	Slope of a curve and the derivative:-meaning and significance – (Total and Marginal concepts in economics).	2	1					
	4.3	Rules of differentiation: sum-difference, power, product And quotient, chain, implicitfunction	4	2					
	4.4	Higher order derivatives:Optimising functions of single Real variable-Economic decisions and the optima (Functions like Utility, Profit, Cost etc.).	5	2					
<b>Practicum:</b>	1. Illustration of calculating marginal concepts from table and using derivatives. 2. Illustrate the concept of optimisation using the profit maximisation example (with diagrams if necessary). 3. Discussion on decisions being made at the optima especially economic decisions.		9	2					
<b>5</b>	<b>Teacher Specific Module</b>								
<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> oCD1-Lecture by use of boards/ LCD projectors /Projectors etc. oCD2-Tutorials / Assignments								
	o CD3-Class Seminars o CD4-Peer group discussions								
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA)–30 Marks</b> <table><tr><td><b>Components of CCA</b></td></tr><tr><td>Class Tests</td></tr><tr><td>Assignments</td></tr><tr><td>Seminar/Viva</td></tr><tr><td>Project/ Quiz/ Book Review/ Fieldworketc.</td></tr></table>				<b>Components of CCA</b>	Class Tests	Assignments	Seminar/Viva	Project/ Quiz/ Book Review/ Fieldworketc.
<b>Components of CCA</b>									
Class Tests									
Assignments									
Seminar/Viva									
Project/ Quiz/ Book Review/ Fieldworketc.									

**B.End Semester Examination (ESE): 70 marks; Time 2 hours.**

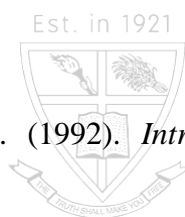
End Semester Examination (ESE) 2 Hours			
Descriptive type	Word Limit	Number of questions to be answered	Marks
Short Answer	30 words	10 out of 15	10x2=20
Short Essay	150 words	10 out of 15	10x5=50
Total Marks			70

**Reference**

1. Chiang,A.C.,&Wainwright,K.(2013).*FundamentalMethodsofMathematicalEconomics*.
2. Dowling,E.(2000).*Schaum'sOutlineofIntroductiontoMathematicalEconomics*,3rd Edition. McGraw Hill Professional
3. Anthony,M.,Biggs,N.,&Biggs,N.L.(1996).*MathematicsforEconomicsandFinance: Methods and Modelling*. Cambridge University Press.
4. Simon,C.P.(2010).*MathematicsForEconomists*.
5. Jacques,I.(2017).*MathematicsforEconomicsandbusiness*.

**SuggestedReadings:**

1. Holden, K., & Pearson, A. W. (1992). *Introductory Mathematics for Economics andBusiness*.



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<b>Programme</b>	<b>BA(Hons) Economics</b>				
<b>Course Name</b>	<b>Introduction to Data Analysis for Economics</b>				
<b>Type of Course</b>	<b>DSE</b>				
<b>Course Code</b>	<b>UC3DSEECO200</b>				
<b>Cours Level</b>	<b>200-299</b>				
<b>Course Summary</b>	This course is designed to provide students with fundamental data analysis skills in the field of economics. Covering statistical methods and quantitative tools, it emphasizes hands-on applications such as data exploration, visualization, and interpretation. Students will learn to model economic trends, make predictions, and extract meaningful insights from datasets. The course equips them to contribute effectively to economic decision-making, market research, and policy formulation in an increasingly data-centric environment.				
<b>Semester</b>	<b>3</b>	<b>Credits</b>			<b>4</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>
		<b>3</b>	<b>0</b>	<b>1</b>	<b>75</b>
<b>Pre-requisites,if any</b>	Computer lab facility is a pre requisite for this course. At least 40% of the class should be taken with practical sessions in the computer lab.				

### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the students will be able to:</i>	<b>Learning Domains</b> *	<b>PO No</b>
1	Understand the fundamentals of spread-sheet packages for data analysis.	U	1
2	Apply data analysis tools to simple problems in economics.	A	2
3	Analyse data using the basic techniques learnt.	An	2
4	Create simple models for economic analysis.	C	2
<i>*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation(Ap)</i>			

**COURSE CONTENT**  
**Content for Classroom Transactions (Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Introduction to spreadsheets</b>		<b>16</b>	
	1.1	Introducing spreadsheets as a tool for data analysis	1	1
	1.2	Terminology and navigation-entering data-basic operations, operators and functions	3	1
	1.3	Creating and using named cells-working with multiple sheets- avoiding errors, data types and basic treatments	3	1
	1.4	Some inbuilt functions:COUNT(),MIN(),MAX(),SUM(), AVERAGE(), ROUND(), Text functions:LEFT(),RIGHT(),MID(),TRIM(),LEN(),FIND(), SEARCH(), REPT(), CONCATENATE(), REPLACE(), VALUE(),UPPER(), LOWER(), CHAR()	5	1
<b>Practicum:</b>	1. Navigation and basic operations 2. Using the inbuilt functions on data sets		4	2
<b>2</b>	<b>Handling, charting and simple modeling using data</b>		<b>18</b>	
	2.1	Data sorting,filtering and parsing	2	2
	2.2	Data charting : x y scatter plot-secondary axis,column and bar charts, pie-chart, legends and titles	2	2
	2.3	Modelling: Symbols, expressions and simple models, creating general algebraic models-simple functions in economics,logical tests-linear functions involving logical tests	3	2
	2.4	Vertical lookup function,Combining conditional statements with lookup functions	3	2
<b>Practicum</b>	1. Using filters to answer specific questions on data sets 2. Plotting data using different charts		8	2,3
	3.Using conditional tests and lookup functions on data sets			
<b>3</b>	<b>Collating and describing data</b>		<b>14</b>	
	3.1	Collating and categorising :Frequency distribution, cumulative frequency distribution (discrete and continuous)-selecting class interval, categorising data, Pivot tables	2	2,3
	3.2	Central tendency:mean, median, mode and weighted averages	2	3
	3.3	Dispersion:range, standard deviation, variance, inter quartile range, coefficient of variation	2	3
	3.4	Calculating the mean, standard deviation and variance from frequency distributions	2	3
	1. Using pivot tables on data		6	2,3

<b>Practicum</b>	2. Using measures of central tendency and dispersion on data sets			
<b>4</b>	<b>Correlation, regression and financial arithmetic</b>		<b>27</b>	
	4.1	Correlation analysis: Pearson's correlation coefficient- scattergram and CORREL() function, Cross-tabulation and contingency tables	3	2,3
	4.2	Regression analysis: Simple linear regression, adding trendline to the scattergram-INTERCEPT() and SLOPE() functions, non-linear regression	4	2,3,4
	4.3	Add ins : using Data Analysis Routine for calculating mean, standard deviation and variance of variables–correlation and regression coefficients.	3	2,3,4
	4.4	Financial Arithmetic : simple interest, compound interest, fractional years, variations in the compounding period, continuous compounding, growth rate calculations, annuities, debt repayments, Net Present Value and Internal Rate of Return	5	2,3
<b>Practicum</b>	1. Using functions to find correlation coefficient and regression coefficients 2. Using Analysis tool pack for creating correlation matrix and regression tables 3. Creating financial arithmetic calculators		12	2,3,4
<b>5</b>	<b>Teacher Specific Module</b>			

<b>Teaching and Learning Approach</b>	<p><b>Classroom Procedure (Mode of transaction)</b>  Classroom Lectures and Lab based exercises: Traditional lectures can be supplemented by lab based exercises. An important part of this course is that students should learn the basic data analysis skills through computer lab sessions. At least fifty percent of the sessions should be engaged with the help of computer lab/exercises.</p> <p><b>Suggested Course Delivery Methods</b></p> <ul style="list-style-type: none"> <li>• CD1-Lecture and computer lab sessions.</li> <li>• CD2- Tutorials / Assignments.</li> <li>• CD3-Peer teaching.</li> </ul>
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<div></div>	<b>MODE OF ASSESSMENT</b>																						
	<b>I.Theory–75 marks (A. Continuous Comprehensive Assessment (CCA) : 25marks, B. End Semester Exam (ESE) : 50marks).</b>																						
	<b>A. Continuous Comprehensive Assessment (CCA): 25marks.</b>																						
	<table><tr><th colspan="4">A. Continuous Comprehensive Assessment (CCA)</th></tr><tr><th colspan="3">Components</th><th>Marks</th></tr><tr><td colspan="3">Lab based exercises, Class tests, Presentation/Seminar, Assignment, Mini Project, Open Book test, Industry Visit Report.</td><td>25</td></tr><tr><td colspan="3">Total Marks</td><td>25</td></tr></table>				A. Continuous Comprehensive Assessment (CCA)				Components			Marks	Lab based exercises, Class tests, Presentation/Seminar, Assignment, Mini Project, Open Book test, Industry Visit Report.			25	Total Marks			25			
	A. Continuous Comprehensive Assessment (CCA)																						
	Components			Marks																			
	Lab based exercises, Class tests, Presentation/Seminar, Assignment, Mini Project, Open Book test, Industry Visit Report.			25																			
	Total Marks			25																			
	<b>B. End Semester Examination (ESE) : 50 marks; Time 1 hour and 30 minutes.</b>																						
	<table><tr><th colspan="4">End Semester Examination (ESE) 1 Hour and 30 minutes</th></tr><tr><th>Descriptive type</th><th>Word Limit</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>Short Answer</td><td>30 words</td><td>10 out of 15</td><td>10x2=20</td></tr><tr><td>Short Essay</td><td>150 words</td><td>6 out of 10</td><td>6x5=30</td></tr><tr><td colspan="3">Total Marks</td><td>50</td></tr></table>				End Semester Examination (ESE) 1 Hour and 30 minutes				Descriptive type	Word Limit	Number of questions to be answered	Marks	Short Answer	30 words	10 out of 15	10x2=20	Short Essay	150 words	6 out of 10	6x5=30	Total Marks		
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Short Answer	30 words	10 out of 15	10x2=20																				
Short Essay	150 words	6 out of 10	6x5=30																				
Total Marks			50																				
<b>II.Practical Examination : 50 marks (A.Continuous Comprehensive Assessment (CCA): 15 marks, B. End Semester Examination (ESE): 35 marks).</b>																							
<b>A. Continuous Comprehensive Assessment (CCA) : 15 marks.</b>																							
<b>A. Continuous Comprehensive Assessment (CCA)</b>																							
<table><tr><th colspan="3">Components</th><th>Marks</th></tr><tr><td colspan="3">Industry Expert Interaction Report, Industry Project Collaboration Report, Hackathon Report, Prototyping of a Data Analysis solution, Lab based exercises, Presentation/Seminar.</td><td>15</td></tr><tr><td colspan="3">Total Marks</td><td>15</td></tr></table>				Components			Marks	Industry Expert Interaction Report, Industry Project Collaboration Report, Hackathon Report, Prototyping of a Data Analysis solution, Lab based exercises, Presentation/Seminar.			15	Total Marks			15								
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Industry Expert Interaction Report, Industry Project Collaboration Report, Hackathon Report, Prototyping of a Data Analysis solution, Lab based exercises, Presentation/Seminar.			15																				
Total Marks			15																				
<b>B. End Semester Examination (ESE) : 35 marks (1 hour)</b>																							
<table><tr><th colspan="2">End Semester Examination (ESE)</th></tr><tr><th>Type</th><th>Marks</th></tr><tr><td>Lab based examination.</td><td>35</td></tr><tr><td>Total Marks</td><td>35</td></tr></table>				End Semester Examination (ESE)		Type	Marks	Lab based examination.	35	Total Marks	35												
End Semester Examination (ESE)																							
Type	Marks																						
Lab based examination.	35																						
Total Marks	35																						

### References

1. Whigham,D.(2007).*BusinessdataanalysisusingExcel*.OxfordUniversityPress
2. Bissett,B.D.(2018).*AutomateddataanalysisusingExcel*.CRCPress.
3. Winston,W.L.(2022).*MICROSOFTEXCEL2019:DataAnalysisandBusinessModelling*.

### .SuggestedReadings:

1. Moore,DavidS.,etal.(2021),*TheBasicPracticeofStatistics*.
2. Keller,G.(2014).*StatisticsforManagementandEconomics*.CengageLearning

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Programme	BA(Hons)Economics					
CourseName	Financial Economics					
TypeofCourse	DSE					
CourseCode	UC3DSEECO201					
CourseLevel	200-299					
Course Summary	Financial economics offers an in-depth exploration of how economic principles and theories drive financial decisions, markets, and policies. It gives an understanding of the fundamental principles underlying financial markets assets, and the allocation of resources in an economy.This course prepares individuals for careers in finance, banking, consulting, investment management and policy analysis by providing a comprehensive understanding of the complex relationship between economics and finance and decision making.					
Semester	3	Credits			4	Total
Course Details	Learning Approach	Lecture	Tutorial	Practicum/ Practical	Others	Hours
		3		1		75
Pre-requisites,if any		Should have a basic knowledge in economics and financial institutions				

### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the students will be able to:</i>	<b>Learning Domains*</b>	<b>PO No</b>
1	Understand and analyse Financial Economic Concepts.	Understand and Analyze	1,2
2	Evaluate Financial Assets.	Evaluate	2
3	Enhance Financial Planning Skills.	Apply	4,5
4	Design Financial Strategy.	Create	1,2
5	Apply Financial theory.	Create	10
<b>*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation (Ap)</b>			

**COURSE CONTENT**  
**Content for Classroom transaction (Units)**


Module	Units	Course description	Hrs	CONo.
		<b>An Introduction to financial Economics</b>	<b>21</b>	
<b>1</b>	1.1	Indian Financial System- money market and New Issue market and Stock Exchanges-Regulation and supervision of financial system.	3	1
	1.2	Financial Economic Methods-Discounting -Risk Management and diversification.	2	1
	1.3	Single-period random cash flows Random asset returns; portfolios of assets; portfolio mean and variance; feasible combinations of mean and variance.	3	1
	1.4	Mean-variance portfolio analysis: the Markowitz model and the two-fund theorem; risk-free assets and the one-fund theorem.	3	2
	<b>Practicum</b>	Analyse a set of financial data using the technique of single period random cash flows method. Use the mean and variance to exhibit the properties of a set of financial data. Est. in 1921	10	2
<b>2</b>		<b>Capital Pricing and Investment Theory</b>	<b>25</b>	
	2.1	The capital market line; the capital asset pricing model; the beta of an asset and of a portfolio; security market line; use of the Capital Asset Pricing Model (CAPM) in investment analysis and as a pricing formula.	3	1
	2.2	Financial Investment-Theory and structure of interest rates.	2	1,10
	2.3	Corporate finance-, Corporate Finance Patterns of corporate financing: common stock; debt; preferences; convertibles; Capital structure and the cost of capital; corporate debt and dividend policy; the Modigliani Miller theorem. Time Value of Money: Future Value, Present Value, Valuation of annuities and perpetuities.	6	4
	2.4	Investment Criteria: Net Present Value, Benefit Cost Ratio, Internal Rate of Return,--Discounted Payback Period--risk and return-measurement of risk and return of an asset.	4	2

	Practicum	Prepare a data analysis project about assessment of financial investment using NPV. Discuss how the risk and return evaluation can be done for an asset.	10	3		
3		Risk and Return	20			
	3.1	Types of Risk-Measurement and trade-off between risk and return-Asymmetric information-Moral hazard-Adverse selection-Principal Agent Problem (Concepts Only).	5	1		
	3.2	Interest risk management-Liquidity management-Recent financial failures.	2	1		
	3.3	Introduction to Personal Finance- Goal setting –cash management –SIP- investment alternatives- retirement plans (concept only).	3	3,4,5		
	Practicum	Analyse the trade –off between risk and return in the case of different types of assets using a secondary data. Prepare an assignment about any of the recent mega financial failures.	10	4		
		Derivative Markets	9			
4	4.1	Brief history of derivatives. 1921	1	1		
	4.2	Types- Forwards, futures, options and swaps– arbitrage-Theories of future prices –Cost of Carry Model, The expectation Model (Concepts Only).	4	1		
	4.3	Exchange Traded Funds and others.	2	1		
	4.4	Valuation of derivatives- Black Scholes Model (Concept only).	2	1		
5		Teacher specific Module				
Teaching and Learning Approach	Classroom Procedure (Mode of transaction) Classroom Lectures and Authentic Learning : Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities : Foster student engagement through interactive class discussions Suggested Course Delivery Methods <ul style="list-style-type: none"><li>o CD1-Lecture by use of boards/ LCD projectors/ Projectors etc.</li><li>o CD2- Tutorials/Assignments</li><li>o CD3-Class Seminars</li><li>o CD4-Peer group Discussions</li></ul>					
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8. Fisher, D. E. and Jordan, R. J. (1999). Security Analysis and Portfolio management, Eastern Economy Edition.

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Programme		BA(Hons)Economics						
Course Name		Life Insurance						
Type of Course		DSE						
Course Code		UC3DSEECO202						
Course Level		200-299						
Course Summary		This course is designed to equip learners with the fundamental statistical tools used in economic analysis. This course also aims at empowering students with the basic requirements for analysing economic data.						
Semester		3		Credits		4		Total Hours
Course Details		Learning Approach		Lecture	Tutorial	Practical/ Practicum	Others	
				3	0	1		
Pre-requisites,if any								

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains*	PO No
1	To extends the information on the origin and nature of Insurance	U	1
2	To understand the essentials of life insurance contract	Ap	2
3	To understand different types of life insurance products and the procedure for settling the claims in life insurance.	A	10
4	To assess the role of insurance agents and legal requirements in insurance business.	An	2
<b>*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation(Ap)</b>			

**COURSE CONTENT**  
**Content for Classroom Transactions (Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Introduction to Life Insurance</b>		<b>20</b>	
	1.1	Insurance-Meaning-Types of Insurance.	2	1
	1.2	Difference between life and non-life insurance- Different types of General Insurance products in India Evolution of life insurance, ancient India-modern form of life insurance.	4	2
	1.3	Growth of Insurance industry after independence , Important regulation of life insurance business in India, Individual life insurance.	2	2
	1.4	Insurance sector reforms, IRDA Structure and function, Life Insurance Corporation.	2	2
	<b>Practicum</b>	Map out the conceptual foundations of life insurance as a financial product. Discuss the functions of IRDA. Explain the trends in the growth of insurance industry in India.	10	2
<b>2</b>	<b>Life Insurance Contract</b>		<b>24</b>	
	2.1	Insurance as a contract, distinguishing characteristics, insurable interest, utmost good faith, principle of indemnity- doctrine of subrogation - warranties, medical examination.	5	1
	2.2	Nomination and assignment, lapse revival, surrender value, paid up policies, maturity, loan to policyholders.	3	2
	2.3	Policy construction and delivery Methods of calculating economic risks in life insurance proposals –factors affecting risk.	2	1
	2.4	Underwriting the process of Rating and Reinsurance.	1	
	2.5	Distribution of surplus, premium, basic elements in computation of life insurance premium, important documents in life insurance contract.	3	2
	<b>Practicum</b>	Classify the importance documents needed for starting life insurance policy. Discuss the importance of underwriting process, rating and reinsurance. Explain the significance of insurance contract as a vital element of delivering the insurance product.	10	2
<b>3</b>	<b>Life Insurance Policies and its Applications</b>		<b>15</b>	
	3.1	Important life insurance policies issued by the Life	2	1

		Insurance Corporation of India, Life Insurance activities ,Group insurance.		
	3.2	General structure of a policy document, Concept of Risk Management.	2	2
	3.3	Pension and Annuities-individual pension scheme principles and types, Reinsurance,-types of Different methods.	3	2
	3.4	Life Insurance,Taxation Aspects, Different types of insurance policies ,individual life Insurance Plans, Retirement benefits that are to be by the employer to employees, Equity Linked Insurance Plans.	4	3
	3.5	Types ofclaim settlements, Survival, Maturity and Death claims, Proposal, Missing persons, Presumption of Death.	2	1
	<b>Practicum</b>	Explain the significance of LIC as a market leader.	2	3
<b>4</b>	<b>Life Insurance Salesmanship and Benefit Payment</b>		<b>16</b>	
	4.1	Benefit payment guidelines, classification of benefit payment.	2	1
	4.2	Insurance agent, essential qualities of an ideal insurance agent, rules of agency	2	2,4
	4.3	Insurance broker, difference between Agent and Broker.	2	2
	4.4	Insurance marketing, after- sales service to policy holders.	2	2
	<b>Practicum</b>	Explain the role of broker and agent in insurance industry. Discuss the problems of mis-selling of insurance products.	8	2
<b>5</b>	<b>Teacher Specific Module</b>			
<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active- interactive learning, brainstorming, seminar, group activities : Foster student engagement through interactive class discussions  <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"> <li>o CD1- Lecture by use of boards / LCD projectors / Projectors etc.</li> <li>o CD2- Tutorials / Assignments</li> <li>o CD3-Class Seminars</li> <li>o CD4-Peer group discussions</li> </ul>			
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1. K.C.Mishra|C.S.Kumar, Life Insurance: Principles and Practice, National Insurance Academy| Cengage Learning, New Delhi.
2. M.N.Mishra|S.B Mishra(2008), Insurance: Principles and Practice, S.Chand and Company, New Delhi.
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6. Tripathy and Pal(2005), Insurance: Theory and Practice, Prentice-Hall of India
7. Palande, Insurance in India, Sage Publications, Delhi
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<b>Programme</b>	<b>BA(Hons) Economics</b>				
<b>CourseName</b>	<b>Monetary Economics</b>				
<b>TypeofCourse</b>	<b>DSE</b>				
<b>Course Code</b>	<b>UC3DSEECO203</b>				
<b>Course Level</b>	<b>300-399</b>				
<b>Course Summary</b>	This Paper intends to make students aware about the role of money and familiarise monetary system.				
<b>Semester</b>	3	<b>Credits</b>			4
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>
		3		1	
<b>Pre-requisites,if any</b>	Basic Macroeconomics knowledge				

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains*	PO No
1	Analyse the concept of money standard and evolution of money.	An	1,23
2	Understand demand and supply of money and its motives.	U	3,10
3	Evaluate the income and commodity theory of money.	E	3,4,6
4	Analyse the real and nominal variables in the quantity theory of money framework.	An	10
*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

#### Content for Classroom transactions (Units)


Module	Units	Course Description	Hrs	CO No.
1		<b>Basics of Money</b>	<b>21</b>	
	1.1	Meaning and Definition – Evolution of Money- Classification of money.	3	1
		Four approaches to the supply of money: Conventional		

	1.2	Approach, Chicago Approach, Gurley and Shaw Approach and Central Bank Approach.	4	1
	1.3	Functions of Money – role of money in a modern economy-Relation between money supply and inflation.	3	1
	1.4	Meaning of monetary standard – Methods of note issue-Electronic money and Central Bank Digital Currency.	3	1
	Practicum	Research the potential benefits and risks of implementing CBDCs.Consider factors like financial inclusion, transaction efficiency, and potential impacts on commercial banks.	8	1
<b>2</b>		<b>Theories of Money</b>	<b>21</b>	
	2.1	Theories of money-Traditional quantity theory : Cash transactions approach and cash balance approaches.	2	2
	2.2	Keynesian monetary theory-Friedman’s restatement of the quantity theory- Significance of demand for money in monetary theory.	4	2
	2.3	Neutrality of money – Real balance effect.	3	3
	2.4	Monetary aggregates in India – High Power Money, Narrow Money and Broad Money-Money Multiplier.	4	2
	Practicum	Choose a specific period in India's recent economic history (e.g., post-pandemic recovery period). Analyze the trends in monetary aggregates and derive the Money Multiplier during this period.	8	3
<b>3</b>		<b>Central Banking and Monetary Policy</b>	<b>13</b>	
	3.1	Central Banking : Evolution of central banking-Functions of central banks.	3	3
	3.2	Monetary policy: Objectives instruments and targets-Monetary Policy instruments in India-Monetary Policy Transmission Mechanism – Monetary Policy Framework-Inflation Targeting MPF.	3	3
	3.3	Defining liquidity – Call Money Market - LAF.	3	3
	Practicum	Gain a comprehensive understanding of the goals and tools of monetary policy in India .Make an analysis of RBI's policy Pronouncements and the rationale behind their decisions	4	3
<b>4</b>		<b>Money and banking</b>	<b>20</b>	
	4.1	Money and Inflation: Inflation: types -Measurement of inflationin India : the CPI- Causes and effects of inflation-Measures to control price level.	8	4
	4.2	Commercial banking : Balance sheet of a bank- NPA and provisioning - CRAR.	2	4
	Practicum	Study and create a well-structured report explaining the core components of a bank's balance sheet, NPAs, provisioning practices, and the importance of Capital Adequacy Ratio	10	4

		(CAR) for financial stability.																						
5	Teacher specific Module																							
Teaching and Learning Approach	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active- interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>o CD1-Lecture by use of boards / LCD projectors / Projectors etc.</li><li>o CD2- Tutorials / Assignments</li><li>o CD3-Class Seminars</li><li>o CD4-Peer group Discussions</li></ul>																							
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1. RRP Paul, Monetary Economics, Recent Edition
2. M.L Seth, Monetary Economics
3. R.B Sayers, Monetary Economics
4. Gupta S.B, Monetary Economics, S. Chand and Co, Delhi
5. Jagdish Handa, Monetary Economics, TR Publications

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Programme	BA(Hons)Economics					
Course Name	Navigating Surveys for Academic and Professional Success					
Type of Course	DSE					
Course Code	UC3DSEECO204					
Course Level	200-299					
Course Summary	This course covers the various types and methods of social science enquiry, being distinguished from other areas. Main focus of the course is to provide the techniques related to surveys and their analysis. Different design elements involved in economic research that are exclusively related to field study are covered in this course. Sampling Techniques are explored, covering Population, Census, and Sampling methods. Tools for data collection, processing, and analysis are elaborated, including the use of spreadsheets and chart types. The syllabus concludes with insights into Report Writing, emphasizing its significance and outlining the steps involved.					
Semester	3	Credits			4	Total Hours
		Lecture	Tutorial	Practical/ Practicum	Others	
Course Details	Learning Approach	3		1		75
Pre-requisites, if any						

#### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the learner will be able to:</i>	<b>Learning Domains*</b>	<b>PO No</b>
1	Differentiate approaches in scientific inquiry and various scientific studies to understand the importance of factual reporting.	U	1,4
2	Understand the significance of primary data and its factual level implications in a socio economic study.	U,A,An	6
3	Summarize the meaning and characteristics of surveys, distinguishing Between social and economic surveys.	An	9

4	Illustrate the steps involved in conducting a survey, from planning to data analysis.	A	9
5	Translate the purposes of sampling and their applications indifferent sizes and characters of population.	U	3,1
6	Make use of the tools for a comprehensive study proposal and be adept at data processing tasks and report writing.	C,S	1,10
*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation (Ap).			

**COURSE CONTENT**  
**Content for Classroom Transactions (Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Introduction to Scientific Inquiry</b>		<b>21</b>	
	1.1	Types and Methods of Scientific Inquiry - Description vs. Storytelling- Pure – applied - Exploratory– Descriptive - Diagnostic study- Evaluation studies- action research- experimental research analytical study- historical study- surveys- case study–Field study- Primary vs.Secondary Data (Factual level only)	5	1,2
	1.2	Understand Surveys : Meaning – Characteristics–steps involved in a survey – purposes of a survey – the subject matter of survey (Social Surveys and Economic Surveys) – Fields of application (Factual and Conceptual Level)	4	1,2
	1.3	Coverage of surveys: Census vs. Sample – Advantages and Limitations of Survey Research (Factual and Conceptual Level)	2	3
	<b>Practicum</b>	Design surveys on the following three areas-consumer behavior, social issues and economic trends.	10	3
<b>2</b>	<b>Surveys and Sampling Techniques</b>		<b>24</b>	
	2.1	Planning of Survey Study: Study design: meaning – importance–contentofstudyproposalorplan:introduction -statement of the problem- review of previous studies – scope of the study – objectives – conceptual model- hypothesis- operational definition of concepts – significance – geographical area covered – reference period – methodology–sampling plan–tools for gathering data–plan of analysis – chapter scheme – time budget – financial budget (Conceptual Level)	7	2,3, 4
	2.2	Sampling Techniques: Population and sample, Census Enquiry and Sampling, Purposive and non-purposive Sampling, Sample Size	2	4,5

	2.3	Sampling Procedure: SRS (WR and WOR), Stratified, Systematic, Repeated Systematic, Cluster and Multi-Stage cluster, Quota Sampling and Sequential Sampling, Sample Weights and Choice of Sampling Design. (Conceptual Level)	5	4,5
	<b>Practicum</b>	Conduct a mock survey to illustrate the various steps involved in the formation of a survey. Explain the various survey techniques. Explain the various survey procedures using a mock survey.	10	4,5
<b>3</b>	<b>Data Collection , Processing and Presentation</b>		<b>19</b>	
	3.1	Tools for Data Collection: Methods of Primary Data: Observation, Interview and Questionnaire/ Schedule; Structured vs. Unstructured and Participatory vs. Non-Participatory, The Pilot Survey, Reliability and Validity. (Conceptual and Procedural Level)	7	4,5
	3.2	Data Processing : Editing - Coding-Classification and Tabulation - construction of frequency table	2	4
	3.3	Graphical representation – Graphs /charts / diagrams (Conceptual Level) <sup>21</sup> Activity: Preparation of questionnaire, Sample Survey, data tabulation and presentation	2	4,5
	<b>Practicum</b>	Demonstrate classification and tabulation steps using a mock survey findings or data using an already conducted survey. Design a graphical representation of a survey.	8	4,5
<b>4</b>	<b>Survey Techniques in Practice</b>		<b>11</b>	
	4.1	Data Analysis: Descriptive Analysis – Inferential Analysis – computerized analysis and Presentation using a spreadsheet- Using Functions– Sum, Average, Max, Min, Count, Counta -Absolute, Mixed and Relative Referencing- Creating Simple Pivot Tables- Basic and Advanced Value Field Setting - Classic Pivot table - Choosing Field - Filtering Pivot Tables-Modifying Pivot Table Data –Grouping based on numbers and Dates (Conceptual and Procedural Level) (Practical / hands-on Activity)	5	1,2,3,4,5,6
	4.2	Data Processing: Editing- Coding- Classification and Tabulation- Graphical representation– Graphs/charts/ diagrams Report writing – Significance of Report writing – Different steps in writing a Report – Popular reports. (Conceptual Level) Activity: conduct one socio- economic survey and	4	1,2,3,4,5,6

		submission of its Report.		
	<b>Practicum</b>	Demonstrate how a survey report is to be written using the analysis of a given survey.	2	6
<b>5</b>	<b>Teacher Specific Module</b>			

<b>Teaching and Learning Approach</b>	<p><b>Suggested Classroom Procedure (Mode of transaction)</b></p> <p><b>CD1- Lecture-Based Instruction:</b> Conduct traditional lectures to introduce and explain concepts such as types and methods of scientific inquiry, the distinction between description and storytelling, and the significance of pure and applied research.</p> <p><b>CD2 - Case Study Analysis:</b> Understand real-world case studies to illustrate the application of exploratory, descriptive, diagnostic, evaluation, action research, experimental, analytical, historical, survey, and field study methods.</p> <p><b>CD3 - Group Discussions:</b> Facilitate group discussions to explore and compare primary and secondary data, discussing the factual implications at different levels.</p> <p><b>CD4 - Interactive Workshops:</b> Conduct interactive workshops for understanding surveys, emphasizing characteristics, steps, purposes, and subject matter, with a focus on social and economic surveys.</p> <p><b>CD5 - Scientific study Proposal Development:</b> Engage students in practical exercises to develop study proposals, covering problem statements, objectives, hypotheses, conceptual models, and operational definitions.</p> <p><b>CD6 -Sampling Simulation:</b> Simulate sampling techniques through activities, discussing population and sample, census, purposive and non-purposive sampling, sample size, and various sampling procedures.</p> <p><b>CD7 - Role-Play for Data Collection Methods:</b> Use role-play scenarios for practicing observation, interview, and questionnaire/schedule methods, emphasizing structured vs. unstructured and participatory vs. non-participatory approaches.</p> <p><b>CD8 - Computer Labs:</b> Conduct hands-on labs for data processing, covering editing, coding, classification, tabulation, and the construction of frequency tables.</p> <p><b>CD9 -Statistical Software Training:</b> Provide training on statistical software for data analysis, including descriptive and inferential analysis, spreadsheet functions, and pivot table creation.</p> <p><b>CD10 - Practical Report Writing:</b> Assign practical report writing tasks to enhance understanding of the significance of report writing and the different steps involved.</p> <p><b>CD11 -Peer Review Sessions:</b> Organize peer review sessions for students to evaluate and provide feedback on each other's research proposals, survey designs, and reports.</p>			
	<p align="center"><b>MODE OF ASSESSMENT</b></p> <p><b>A. Continuous Comprehensive Assessment (CCA) – 30Marks</b></p>			




<b>Assessment Types</b>	<b>Components of CCA</b>			
	Class Tests, Industry Visit Report, Digital Survey Exercise, Assignments, Seminar/Viva, Project/ Practicum /Quiz /Book Review /Fieldwork.			
	<b>B. End Semester Examination (ESE) : 70 marks; Time 2 hours.</b>			
	<b>End Semester Examination (ESE) 2 Hours</b>			
	<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	30 words	10 out of 15	10x2=20
	Short Essay	150 words	10 out of 15	10x5=50
	<b>Total Marks</b>			<b>70</b>

### References

1. Aggarwal, Y.P. (2017). *Research Methodology in Social Sciences*. APH Publishing Corporation.
2. Chakraborty, S. K. (2013). *Research Methodology: Methods and Techniques*. SAGE Publications India Pvt Ltd.
3. Kothari, C.R. (2004). *Research Methodology: Methods and Techniques*. New Age International.
4. Kumar, R. (2019). *Research Methodology : A Step-by-Step Guide for Beginners*. Sage Publications.
5. Panneerselvam, R. (2014). *Research Methodology*. PHI Learning Pvt. Ltd.

### Suggested Readings:

1. Babbie, E.R. (2016). *The Practice of Social Research*. Cengage Learning.
2. Cohen, L., Manion, L., & Morrison, K. (2017). *Research Methods in Education*. Routledge.
3. Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.
4. Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.
5. Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). *How to Design and Evaluate Research in Education*. McGraw-Hill Education.
6. Kumar, R. (2014). *Research Methodology: A Step-by-Step Guide for Beginners*. Sage Publications.
7. Leedy, P. D., & Ormrod, J. E. (2014). *Practical Research: Planning and Design*. Pearson.
8. Neuman, W. L. (2014). *Social Research Methods: Qualitative and Quantitative Approaches*. Pearson.
9. Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill-Building Approach*. Wiley.

 <p>Est. in 1921</p>	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>			
<b>Programme</b>	<b>BA(Hons)Economics</b>			
<b>CourseName</b>	<b>EconomicsofHealthandEducation</b>			
<b>TypeofCourse</b>	<b>DSE</b>			
<b>CourseCode</b>	<b>UC3DSEECO205</b>			
<b>CourseLevel</b>	<b>200-299</b>			
<b>CourseSummary</b>	This course examines the fundamental economic ideas and theories that serve as the foundation for the health and education sectors. The analysis of resource allocation, government policies, market dynamics, and the influence of economic factors on health and educational results will be undertaken by students			
<b>Semester</b>	3	<b>Credits</b>		4
<b>CourseDetails</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical</b>
		3		1
<b>Pre-requisites,if any</b>				

### COURSE OUTCOMES (CO)

CONo.	<b>Expected Course Outcome</b> <i>Upon completion of this course, the students will be able to:</i>	<b>Learning Domains *</b>	<b>PO No</b>
1	Understand the concept of human capital and other micro economic theories and its application to health and education.	U	7
2	Understand the role of government and other institutions in education and health sector	U	1
3	Evaluate public policies related to health and education.	E	2
4	Appraise the issues in health and educational sectors of Kerala	E	2
5	Develop research skills to analyze empirical data related to health and educational sectors.	C	2
<b>*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

**COURSE CONTENT**  
**Content for Classroom transaction (Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Economics of Health</b>		<b>18</b>	
	1.1	Health and economic development-Health as human capital- Determinants of Health - Poverty Malnutrition Measurements of Health - Birth rate-Death rate-Infant mortality rate-Maternal mortality rate-Morbidity-Quality of adjusted life year (QALY)	8	1
	1.2	Economic dimensions of health care: Demand and Supply of Health Care (measures and determinants).	5	1
	1.3	Government in health sector-Overview of the health care Delivery System-Health insurance and moral hazard.	5	2
<b>2</b>	<b>Public Health care Policy in India</b>		<b>21</b>	
	2.1	Public healthcare structure in India - Access to healthcare – Issues in public health provisioning-Health care financing in India.	5	3,5
	2.2	National Health Policy-Public health initiatives in India- Highlights of NFHS (recent).	3	3
	2.3	<b>Practicum</b> Choose a specific public health initiative in Kerala (e.g., disease prevention program, maternal health intervention). Utilize data from sources like the National Family Health Survey (NFHS) to analyze trends in relevant health indicators (e.g., infant mortality rate, maternal mortality rate) before and after the implementation of the initiative in your area . Prepare a research report summarizing the findings. Discuss the program's effectiveness in improving health outcomes and its economic justification.Recommend potential improvements or areas for further evaluation (It can be a group activity )	13	3
<b>3</b>	<b>Economics of Education</b>		<b>18</b>	
	3.1	Education and economic development - Human capital theory - Costs and benefits of education- Private and social, direct and indirect-Knowledge economy and innovation ecosystem.	7	1
	3.2	Literacy rates, school participation, school quality measures.- Higher Education in India- Educational financing - National Education Policy –NEP 2020- Public spending on education.	6	3

	3.3	<b>Practicum</b> Analyze data on migration patterns of educated youth from Kerala.	5	3
<b>4</b>	<b>Social Sector in Kerala</b>		<b>18</b>	
	4.1	Kerala model–health sector of Kerala: Prospects and challenges–Mortality Morbidity issues ageing.	3	4,5
	4.2	Educational scenario in Kerala–migration- brain drain.	3	4,5
	4.3	Practicum: Conduct a comprehensive review of the Kerala model of healthcare. Analyze its key features, including: Focus on primary health care and preventive measures. Public health infrastructure and social determinants of health. Write a report on the achievements in reducing mortality and morbidity rate. Project how these trends might evolve in the coming decades, considering the ageing population.	12	4, 5

<b>5</b>	<b>Teacher Specific Module</b>		
<b>Teaching and Learning Approach</b>	<p><b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions</p> <p><b>Suggested Course Delivery Methods</b></p> <ul style="list-style-type: none"> <li>• CD1-Lecture by use of boards /LCD projectors /Projectors etc.</li> <li>• CD2- Tutorials/Assignments</li> <li>• CD3-Class Seminars</li> <li>• CD4- Peer group Discussions</li> </ul>		

Assessment Types	MODE OF ASSESSMENT			
	A.Continuous Comprehensive Assessment(CCA)–30Marks			
	Components of CCA			
	ClassTests			
	Assignments			
	Seminar/Viva			
	Project/Practicum/Quiz/BookReview/Fieldworketc.			
	B.End Semester Examination(ESE):70marks;Time2hours.			
End Semester Examination (ESE) 2 Hours				
Descriptive type	Word Limit	Number of questions to be answered	Marks	

Short Answer	30 words	10 out of 15	10x2=20
Short Essay	150 words	10 out of 15	10x5=50
<b>Total Marks</b>			<b>70</b>

## References

1. Alwin Prakash and Prabhakaran Nair(2008)Kerala's Development Issues in the New Millenium, Serials Publication.
2. BeckerGS(1974),Human Capital Second EditionNBERNewYorkTilak.8J.E.G. (1989) : Economics of Inequality in Education, Sage, New Delhi.
3. BlaugMark(1972) Introduction to Economics of Education,Penguin London
4. DianeMDewar(2010),Essentials of Health Economics,Jones and BarlettPublishers
5. DrRamankutty,HealthEconomics.
6. DrVipinChandranKP(2019)Interpreting Human Development Trajectory of Kerala, Studies on Kerala Economy
7. HendersonJohn,AlistairMcGuire,GavinMooney(2005)-Economics of Health Care, Routledge
8. JWHenderson(2012),Health Economics and Policy,SouthWesternCENGAGE Learning
9. NationalFamilyHealthSurveys(NFHS5) in 1921
10. Saumen Chattopadhyay(2012),Education and Economics: Disciplinary Evolution and Policy Discourse, Oxford University Press
11. StephenMorris,NancyDevlin,DavidParkin,AnneSpencer(2012), Economic Analysis in Health Care, Wiley- Second Edition
12. TDSimon(2019)Health sector of Kerala:Prospects and Challenges,Studies on Kerala Economy
13. Uma Kapila(2022)Indian Economy Since Independence(33rdEdition).
14. Vaizey,J.,(1962) Economics of Education,FaberandFaber,London,

 <p>Est. in 1921</p>	<h1>UNION CHRISTIAN COLLEGE, ALUVA</h1>
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<b>Programme</b>	<b>BA(Hons )Economics</b>				
<b>CourseName</b>	<b>Basics of Fintech Entrepreneurship</b>				
<b>TypeofCourse</b>	<b>DSCB</b>				
<b>CourseCode</b>	<b>UC3DSCECO202</b>				
<b>CourseLevel</b>	<b>200-299</b>				
<b>CourseSummary</b>	<p>This course tries to give an introductory exploration into the dynamic world of financial technology (fintech) and the entrepreneurial opportunities it presents. The course is designed to equip students with a foundational understanding of the fintech landscape, the innovative technologies that drives changes in the economy at present, and the essential skills required to innovate and succeed in this rapidly evolving field. At present, India is having the most vibrant FinTech landscape in the world and hence, the course is designed on the basis of India's rapidly transforming fintech industry. Understanding the trends, technological developments involved, and the regulatory requirements will help the students to embrace fintech entrepreneurship.</p>				
<b>Semester</b>	3	Credits			Total Hours
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practicum / Practical</b>	<b>Others</b>
		3		1	75
<b>Pre-requisites, if any</b>					

### COURSEOUTCOMES(CO)

CO No.	Expected Course Outcome Upon completion of this course, the learner will be able to:	Learning Domains*	PONo
1	Understand the various aspects related to the fintech sector in India.	U	1,2,3
2	Create an idea about the development of a fintech enterprise	C	1,2,3, 10
3	Apply the knowledge acquired here for the development	Ap	6.7.9.

	of a fintech startup.		10
4	Evaluate the prospects and challenges involved in fintech entrepreneurship.	E	5,6,10
*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation(Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>		<b>Overview of the Fintech Sector</b>	<b>24</b>	
	<b>1.1</b>	Introduction to Financial Technologies or Fintechs: Definition, evolution, and importance-Traditional versus digital finance-India as an emerging power in fintech-Trends in Indian Fintech sector: payments, lending, insurance, etc.	4	1,3
	<b>1.2</b>	Fintech supporting infrastructure in India: Digital Public Infrastructure (DPI) in India and its supportive effect on fintech industry-India Stack-ONDC-RBI Innovation Hub.	4	2,3
	<b>1.3</b>	Technological base of fintech entrepreneurship: Use of various technologies including AI in different areas of financial services like client onboarding, loan disbursement, recovery and customer interfaces-Robo advisors in wealth management services-Platforms and practices that support fintech in India: Aadhar verification, KYC norms, e-KYC, Video KYC, Payment Infrastructure, CIBIL Score, CIBIL	6	1,2,3
	<b>Practicum</b>	1. Map out the various components of DPI in India and demonstrate how they helped and supported the birth and rapid proliferation of fintech for financial institutions and the fintech firms. 2. Illustrate the operational aspects of CIBIL score.	10	1,2,3
<b>2</b>		<b>India's Financial Services Industry –a Fintech angle</b>	<b>22</b>	
	<b>2.1</b>	Indian financial services industry-Banks and NBFCs-MFIs, Payment banks and Small Finance Banks- Peer-to-Peer (P2P) Lending Platforms – Loan apps-Account Aggregators and	4	1,2,3
	<b>2.2</b>	Fintech industry in India- Leading categories (payments, lending tech, insure tech, neo banks, fintech Saas etc.) - Banks adopting financial technologies – Fintech firms as financial sector disruptors.	4	3,4
	<b>2.3</b>	Ideation of a fintech firm: Need for a user centric approach –	4	

		Business model canvas and value proposition design- Revenue models: subscription, transaction fees etc-Technological tool kits for Fintech enterprise.		1,2,3,4
	<b>Practicum</b>	1. Map the different types of fintech enterprises operating in India. 2. Explore and demonstrate the interdependence between banks, NBFCs and fintech firms in the Indian context. 3. Give idea on and provide a suitable business model for a potential fintech startup.	10	1,2,3,4
<b>3</b>		<b>Electronic Money-Crypto currencies and Blockchain Technology</b>	<b>15</b>	<b>2,3,4</b>
	3.1	Electronic Money and Cryptocurrencies - CBDC-Types of cryptocurrencies / assets - Difficulties in regulating cryptocurrencies- Global attempts to regulate crypto assets.	4	2,3,4
	3.2	Crypto currencies: Currency vs asset nature - Risks of cryptocurrencies - Crypto Exchanges - Crypto crisis in the recent past.	3	3,4
	3.3	Block chain technology – Applications of block chain technology in the financial sector.	3	3,4
	<b>Practicum</b>	Classify the different types of crypto assets. Compare and contrast crypto assets with CBDC. Analyse the failure of FTX and the message it left to the financial regulators.	5	2,3,4
	<b>4</b>	<b>Regulatory landscape for fintech in India</b>	<b>14</b>	<b>1,2,3,4</b>
	4.1	Regulatory Framework for Fintech industry : RBI Guidelines and Regulations-Fintech Repository.	2	1,2,3
	4.2	Role of Self- Regulatory Organisations (SRO) in the fintech landscape - Financial stability and the fintech industry.	2	2,3,4
	4.3	Evolution of India's digital payment ecosystem- Components of Digital payment ecosystem in India -Uniqueness of UPI- Internationalisation of UPI-Comparison of UPI with other major digital payments systems across the world.	5	1,2,3,4
	<b>Practicum</b>	Discuss the need for drawing a balance between regulation and innovation support of fintechs. Elaborate the unique advantages of UPI as a rockstar in the global fintech arena.	5	1,2,3,4
<b>5</b>	<b>Teacher specific module</b>			



<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <b>CD1-Lecture-Based Instruction:</b> Lecture classes on the various concepts and leading developments related with the FinTech sector. <b>CD2-CaseStudies:</b> Case study related various fintech developments including the crypto crisis, development of fintech startups India etc. <b>CD3-Group Discussions:</b> Disruption caused by fintechs to traditional banking and NBFC business. <b>CD4-InteractiveWorkshops :</b> Use of emerging technologies for the development of fintech business. <b>CD5: Project discussion :</b> On the promotion of ideas, enterprise design and MVP for starting a fintech firm. <b>CD 6: Industry visit:</b> to get awareness about financial technologies adopted by financial entities including banks and NBFCs. <b>CD7:Invited Expert talk</b> by fintech experts and executives.																				
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <b>Components of CCA (30 marks)</b> Fintech Industry Visit Report, Industry Expert Interaction Report, Technology Mapping Work Book, Assignments, Seminar/Viva, Project/Quiz/Book Review/Field Study, Class Tests.																				
	<b>B.End Semester Examination (ESE) : 70 marks; Time 2 hours.</b> <table><tr><th colspan="4">End Semester Examination (ESE) 2 Hours</th></tr><tr><th>Descriptive type</th><th>Word Limit</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>Short Answer</td><td>30 words</td><td>10 out of 15</td><td>10x2=20</td></tr><tr><td>Short Essay</td><td>150words</td><td>10 out of 15</td><td>10x5=50</td></tr><tr><td colspan="3">Total Marks</td><td>70</td></tr></table>	End Semester Examination (ESE) 2 Hours				Descriptive type	Word Limit	Number of questions to be answered	Marks	Short Answer	30 words	10 out of 15	10x2=20	Short Essay	150words	10 out of 15	10x5=50	Total Marks			70
End Semester Examination (ESE) 2 Hours																					
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Short Answer	30 words	10 out of 15	10x2=20																		
Short Essay	150words	10 out of 15	10x5=50																		
Total Marks			70																		

### References

1. The Fintech Entrepreneur's Guide, Ashok Mittal, 2022.
2. Bitcoin and Cryptocurrency Technologies: 4 Books, Keizer Söze, Sabi Shepherd Ltd, 2019.
3. Digital Bank: Strategies To Launch Or Become A Digital Bank, Embassy Books, 2017.
4. Financial Technology (FinTech) and Digital Banking in India, Jaspal Singh, New Century Publications 2022.
5. Fintech Future : The Digital DNA of Finance, Sanjay Phadke, Atlantic Publishers and Distributors (P) Ltd, 2023.
6. Private Equity Venture Capital in Financial and Fintech, October-December 2023, RBI Innovation Hub, RBI.

### Suggested Readings

1. FinTech Revolution in India: Opportunities and Challenges, CA Dr. Brajesh Kumar Jaiswal, Notion Press, February, 2024.
2. RBI Innovation hub, <https://rbihub.in/>

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<b>Programme</b>						
<b>CourseName</b>	<b>Understanding Global Economy</b>					
<b>TypeofCourse</b>	<b>MDC</b>					
<b>CourseCode</b>	UC3MDCECO200					
<b>CourseLevel</b>	<b>200-299</b>					
<b>CourseSummary</b>	<p>It is designed to impart factual knowledge aligned with the Remember and Understand levels of Bloom's Taxonomy. The course aims to prepare learners for competitive exams, particularly the UPSC exams, providing them with the confidence to face such assessments. Moreover, it goes beyond rote memorization by emphasizing the development of skills such as leadership and communication. The incorporation of multidisciplinary, transdisciplinary, and interdisciplinary approaches suggests a broader educational perspective that fosters lifelong learning. Overall, it seems like a Comprehensive and well – rounded program.</p>					
<b>Semester</b>	<b>3</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>	
		3	0	0		45
<b>Pre-requisites,ifany</b>						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains*	PO No
1	Understand the historical evolution of globalization, including an understanding of key events and factors that contributed to the development of international trade and finance.	U	2,3,4, 10
2	Distinguish between different regional trade agreements, and understand their structures, objectives, and impacts on global trade dynamics.	U	9,10

3	Recalls the names of International Economic Organizations	K	9,10
4	Tell about the major world summits and conferences in general.	K	4,7
5	Understand the emerging trends and challenges in the current world economy.	U	4,5,6
<b>*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation(Ap)</b>			

**COURSE CONTENT**  
**Content for Classroom Transactions (Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Introduction to World Trade Policies and Agreements</b>		<b>15</b>	
	1.1	Role and significance of international trade – export led growth-current global trade scenario – globalization and de-globalisation-Major trading powers - India's External Trade Profile-Composition and Direction of India's Trade.	6	1
	1.2	Tariffs, quotas, and non-tariff barriers – neo protectionism-Key balance of payments entries- Exchange rates - Fixed vs. floating exchange rate systems-Depreciation/Appreciation-Devaluation--MNCs-Global Value Chains.	5	1
	1.3	Cross national mobility of capital – various forms of capital flows : FDI, FPI, ECB, DRs, RDBs-FEMA.	4	2
<b>2</b>	<b>Globalization and International Organizations</b>		<b>15</b>	
	2.1	International Monetary Fund-World Bank and its affiliates-WTO-major agreements and current scenario. Regional trade agreements : EU, ASEAN, RCEP-India's FTAs.	5	4
	2.2	Economic crises and financial instability-The Great Depression, Oil shock, Asian Currency Crisis, Great Recession (Global Financial Crisis) 2008, Crypto crash of 2022.	5	4
	2.3	International Economic Organizations - AIIB, NDB, ADB, WIPO, BIS, UNCTAD, FSB, OPEC.	5	3,4
<b>3</b>	<b>Current Issues in the World Economy</b>		<b>15</b>	
	3.1	Geopolitical influences on the global economy, reshoring and friend shoring-Current Account Imbalances – China – US Economic Relations - China and India as global economic powers.	6	5
	3.2	Major world summits - G20 - G7 - G77 –United Nations Climate Change Conference (COP) - Sustainable Development Goals (SDG) -World Economic Forum (Davos) – WTO Ministerial Conference - BRICS.	7	5
	3.3	Major developments in the global economy – Reserve Currencies –role of US Dollar.	2	5
<b>4</b>	<b>Teacher Specific Module</b>			

Teaching and Learning Approach	<p><b>Classroom Procedure (Mode of transaction)</b></p> <p>Classroom Lectures and Authentic Learning : Traditional lectures can provide solid factual knowledge</p> <p>Active – interactive learning, brainstorming, seminar, group activities : Foster student engagement through interactive class discussions</p> <p><b>Suggested Course Delivery Methods</b></p> <ul style="list-style-type: none"><li>• CD1- Lecture by use of boards / LCD projectors / Projectors etc.</li><li>• CD2- Tutorials/Assignments</li><li>• CD3-Class Seminars</li><li>• CD4-Peer group Discussions</li></ul> <p>Unit 3 . 3 <b>Major developments in the global economy</b> is relatively more dynamic areas and <i>Emerging Issues</i>.</p>																			
Assessment Types	<p><b>MODE OF ASSESSMENT</b></p> <p><b>Continuous Comprehensive Assessment (CCA) : 25 Marks</b></p> <table><tr><td><b>Components of CCA</b></td></tr><tr><td>ClassTest-I, Group discussion.</td></tr><tr><td>Chart/Workbook/Other specific assessment</td></tr><tr><td>Seminar/Assignment</td></tr></table>	<b>Components of CCA</b>	ClassTest-I, Group discussion.	Chart/Workbook/Other specific assessment	Seminar/Assignment															
	<b>Components of CCA</b>																			
	ClassTest-I, Group discussion.																			
	Chart/Workbook/Other specific assessment																			
	Seminar/Assignment																			
<p><b>B.End Semester Examination (ESE) : 50 marks; Time 1 hour and 30 minutes.</b></p>																				
<table><tr><td colspan="4"><b>End Semester Examination (ESE) 1 Hour and 30 minutes</b></td></tr><tr><td><b>Descriptive type</b></td><td><b>Word Limit</b></td><td><b>Number of questions to be answered</b></td><td><b>Marks</b></td></tr><tr><td>Short Answer</td><td>30 words</td><td>10 out of 15</td><td>10x2=20</td></tr><tr><td>Short Essay</td><td>150words</td><td>6 out of 10</td><td>6x5=30</td></tr><tr><td colspan="3"><b>Total Marks</b></td><td><b>50</b></td></tr></table>	<b>End Semester Examination (ESE) 1 Hour and 30 minutes</b>				<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>	Short Answer	30 words	10 out of 15	10x2=20	Short Essay	150words	6 out of 10	6x5=30	<b>Total Marks</b>			<b>50</b>
<b>End Semester Examination (ESE) 1 Hour and 30 minutes</b>																				
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Short Essay	150words	6 out of 10	6x5=30																	
<b>Total Marks</b>			<b>50</b>																	

### References

1. Basu, Kaushik. *The Indian Economy : Problems and Prospects*. Oxford University Press, 2016.
2. Das, Gurcharan. *India Unbound: The Social and Economic Revolution from Independence to the Global Information Age*. Anchor Books, 2002.
3. Dutt, Rudra, and K.P.M.Sundaram. *Indian Economy*. S.Chand & Company Ltd., 2017.
4. Friedman, Thomas L. *The Lexus and the Olive Tree : Understanding Globalization*. Anchor Books, 2000.
5. Rodrik, Dani. *Has Globalization Gone Too Far?* Institute for International Economics, 1997.
6. Stiglitz, Joseph E. *Globalization and Its Discontents*. W.W.Norton & Company, 2002.
7. Subramanian, Arvind. *Eclipse: Living in the Shadow of China's Economic Dominance*.

### **Suggested Readings**

For effective preparation of current affairs for competitive exams, it is recommended to select a comprehensive current affairs book in addition to regular newspaper reading and the examination of magazines like Yojana or Kurukshetra. The following list provides some notable options for current affairs books:

1. Annual Reports and Working papers of : IMF, WorldBank, UNO, WTO, World Economic Forum etc.
2. Concise General Knowledge Manual –BarryO’Brien
3. IndiaYear book–Publication Division(GOI)
4. Yojana Magazine
5. Kurukshetra Magazine
6. Economic Survey
7. Pratiyogita Darpan Magazine
8. Concise General Knowledge Manual–JKChopra
9. Current Affairs & News In Focus Objective Questions – Kiran Prakashan
10. The Hindu Daily While learner don't need to go through all these books, it is advisable to select one from the list that aligns with the learner's study preferences. Complement learner's chosen book with consistent newspaper reading and delve into relevant magazines like Yojana or Kurukshetra. This combined approach should suffice for a comprehensive preparation of current affairs for the competitive exam.

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<b>Programme</b>						
<b>Course Name</b>	<b>Gender and Economics</b>					
<b>Type of Course</b>	VAC					
<b>Course Code</b>	UC3VACECO200					
<b>Course Level</b>	<b>200-299</b>					
<b>Course Summary</b>	<p>This course examines the intricate relationship between gender dynamics and economic structures, covering foundational concepts like gender equity and equality. It explores the interdisciplinary nature of Gender Economics, emphasizing its role in economic indices and women's contributions to GDP. This delves into global demographic changes and the evolving gender dynamics, particularly focusing on India and Kerala. Key gender issues in socioeconomic development, including the wage gap and disparities in various sectors, are addressed. The course concludes by examining gender policies at different levels and introducing the principles of gender budgets as tools for reducing disparities.</p>					
<b>Semester</b>	<b>3</b>	<b>Credits</b>			<b>3</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical</b>	<b>Others</b>	
		3		0	0	45
<b>Pre-requisites, if any</b>	Nil					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains*	PO No
1	Critically analyse the role of gender in development.	An	1-10
2	Examine gender issues in socio-economic perspectives.	An	1-10
3	Evaluate contemporary gender policies.	E	1-10
4	Understanding gender in international perspective and from a budgetary angle.	U	1,2,3,5, 6.
<i>*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation(Ap)</i>			

**COURSE CONTENT**  
**Content for Classroom transaction (Units)**

Module	Units	Course description	Hrs	CO No.
1	<b>Gender role in development : 18 Hrs</b>			
	1.1	Definition of Gender – Gender and sex – Gender Equity and Gender Equality	3	1
	1.2	The subject of Gender Economics – Interdisciplinary Approach in gender studies-	3	1
	1.3	Incorporation of gender factor into HDI – Gender equality indices - Gender Development Index(GDI) and Gender Empower Measure (GEM).	3	1
	1.4	Women's contribution to GDP	3	1
	1.5	The gender factor in demographic development – Global demographic changes-Gender shift	3	1
	1.6	Gender status in India and Kerala – Concept of Missing women	3	1
2	<b>Gender issues : 15 Hrs</b>			
	2.1	Main gender issues in socio economic development in developed and developing countries. Est. in 1921	5	2
	2.2	Gender wage gap – Gender Discrimination in Labour Force Participation- Occupational Segregation and Wage Differences – Gender Discrimination In Education, Health, Employment, Political Participation and Decision Making	7	2
	2.3	Feminization of poverty	3	2
3	<b>Gender policies : 12 Hrs</b>			
	3.1	Gender policy : national, regional and global level	4	3
	3.2	International organizations and the role of gender studies and gender policy implementation	4	3,4
	3.3	Gender budgets : Approaches and principles – Budgeting policies to reduce gender disparities.	4	3,4
4		Teacher Specific Content		

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Lecture, Discussion, Seminar, Group activity, Class debate, Guest Lecture, Group discussion, Class presentation, Group Project.		
	<b>MODE OF ASSESSMENT</b> <b>Continuous Comprehensive Assessment (CCA) : 25 Marks</b>		
	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>Components of CCA</b> </div>		

	<table><tr><td>ClassTest-I</td></tr><tr><td>Chart/Workbook/Other specific assessment</td></tr><tr><td>Seminar/Assignment</td></tr></table>	ClassTest-I	Chart/Workbook/Other specific assessment	Seminar/Assignment																	
ClassTest-I																					
Chart/Workbook/Other specific assessment																					
Seminar/Assignment																					
	<p><b>C. End Semester Examination (ESE) : 50 marks; Time 1 hour and 30 minutes.</b></p> <table><tr><th colspan="4"><b>End Semester Examination (ESE) 1 Hour and 30 minutes</b></th></tr><tr><th><b>Descriptive type</b></th><th><b>Word Limit</b></th><th><b>Number of questions to be answered</b></th><th><b>Marks</b></th></tr><tr><td>Short Answer</td><td>30 words</td><td>10 out of 15</td><td>10x2=20</td></tr><tr><td>Short Essay</td><td>150 words</td><td>6 out of 10</td><td>6x5=30</td></tr><tr><td colspan="3"><b>Total Marks</b></td><td><b>50</b></td></tr></table>	<b>End Semester Examination (ESE) 1 Hour and 30 minutes</b>				<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>	Short Answer	30 words	10 out of 15	10x2=20	Short Essay	150 words	6 out of 10	6x5=30	<b>Total Marks</b>			<b>50</b>
<b>End Semester Examination (ESE) 1 Hour and 30 minutes</b>																					
<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>																		
Short Answer	30 words	10 out of 15	10x2=20																		
Short Essay	150 words	6 out of 10	6x5=30																		
<b>Total Marks</b>			<b>50</b>																		

### References

- Desai, N., & Krishnaraj, M. (Year). *Health-A Gender Issue in India*.
- Gulati, L., & Ramalingam. (Year). *Kerala Women: A profile*.
- Kalpagam, U. (2011). *Gender and Development in India: Current Issues*. Rawat Publications.
- OECD. (2022). *Gender Budgeting Highlights*. Retrieved from <https://www.oecd.org/gov/budgeting/Gender-Budgeting-Highlights.pdf>
- OECD. (2023). *Gender Budgeting in OECD Countries*. Retrieved from [https://www.oecd-ilibrary.org/governance/gender-budgeting-in-oecd-countries-2023\\_647d546b-en](https://www.oecd-ilibrary.org/governance/gender-budgeting-in-oecd-countries-2023_647d546b-en)
- Sen, G., & Crown, C. (1987). *Gender and Class in Development Experience*. Routledge.
- UNICEF. (2021). *Gender Policy 2021-2030*. Retrieved from <https://www.unicef.org/media/117706/file/Gender%20Policy%202030.pdf>
- Chakraborty, L. (2021, December 16). *Covid19 and Gender Budgeting: Applying a "gender lens" to Union Budget in India* (W.P.No.362). National Institute of public Finance and policy (NIPFP).
- Becchio, G. (2020). *A History of Feminist and Gender Economics*. New York: Routledge.
- Beneria, L., & Biswanath, S. (2001). *Gender and Development: Theoretical, Empirical and Practical Approaches*.
- Becchio, G. (2019). *A History of Feminist and Gender Economics*. New York: Routledge.
- UN Gender Statistics and Development. Retrieved from <http://www.unece.org/stats/gender/web>
- UN Population Information Network (POPIN). Retrieved from <http://www.un.org/popin>
- UN Women. Retrieved from <http://www.un.org/ru/aboutun/structure/unwomen/>
- NIPFP. Retrieved from [www.nipfp.org.in](http://www.nipfp.org.in)
- UNDP-Human Development Reports.



## Suggested Readings

1. Shafina' Aishath. (2020). Exploring gender differences in the selection of subjects at higher education levels in the Maldives. *International Electronic Journal of Comparative Education*, 19(2). Retrieved from <http://iejcomparative.org>
2. Centre for Science and Environment. (Various years). *State of India's Environment*. New Delhi.
3. Schumacher, E.F. (Year). *Small is Beautiful*. Abacus Publishers, New York.
4. Bharucha, E. (2005). *Textbook of Environmental Studies for Undergraduate Courses*. Universities Press (India) Pvt Ltd.



# SEMESTER 4



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<b>Programme</b>	<b>BA(Hons) Economics</b>				
<b>Course Name</b>	<b>Macroeconomics-I</b>				
<b>Type of Course</b>	<b>DSCA</b>				
<b>Course Code</b>	UC4DSCECO200				
<b>Course Level</b>	<b>200-299</b>				
<b>Course Summary</b>	This course on macroeconomics offers learners foundational insights into various economic theories and key macroeconomic indicators. It explores essential concepts in investment and consumption, prompting students to analyze these patterns within the broader economic framework. Additionally, the course delves into critical macroeconomic challenges such as unemployment and inflation, emphasizing their interconnected nature. Through rigorous analysis and discussion, learners gain a deeper understanding of the complex dynamics shaping economies and societies, preparing them to critically evaluate and propose solutions to contemporary macroeconomic issues.				
<b>Semester</b>	<b>4</b>	<b>Credits</b>			<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>
		<b>4</b>			<b>60</b>
<b>Pre-requisites,if any</b>					

### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the learner will be able to:</i>	<b>Learning Domains*</b>	<b>PO No</b>
1	Explain the main postulates of classical macroeconomics and theories of employment, interest, and money	E	1,4
2	Analyse the relevance of Keynesian revolution after the Great Depression	An	1,2
3	Compare and contrast Classical and Keynesian macroeconomics	An	1
4	Explain the orthodox Keynesian models by incorporating different sectors of the economy	E	1,4
5	Evaluate the consumption and investment pattern of the economy in The background of the respective theories	E	6,10

6	Relate inflation and unemployment in real economic scenarios. Further, evaluate the policy actions by the authorities.	E	6,7
<b>*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I )and Appreciation(Ap)</b>			

**COURSE CONTENT**  
**Content for Classroom Transactions (Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Classical Macroeconomics</b>		15	
	1.1	Main postulates of classical macroeconomics-Focus on supply side of the economy- Say's law of markets-wage price flexibility-full employment-Role of government.	5	1
	1.2	Classical theory of income, output and employment	2	1
	1.3	Classical theory of interest- importance with regard to aggregate demand sufficiency.	3	1
	1.4	Classical theory of Prices-Quantity theory of Money- Cash transaction approach and Cash balance approach-Classical dichotomy and neutrality of money-money illusion.	5	1
<b>2</b>	<b>Keynesian Macroeconomics</b>		15	
	2.1	Emergence of Keynesian Economics: Focus shifts from supply to demand side- Main postulates of Keynesian Economics- Consumption Function - MEC - animal spirits-Multiplier effect (investment, tax, government spending) – Multiplier as a rationale for fiscal policy- Ricardian Equivalence theorem as a classical defence.	8	2,3
	2.2	Concept of Effective Demand-Two sector Keynesian cross model of income determination- Three sector Keynesian Cross model- Four sector Keynesian Cross model.	7	4
<b>3</b>	<b>Theories of Consumption and Investment</b>		15	
	3.1	Consumption Puzzle – Theories of consumption function – Relative income hypothesis - Permanent income hypothesis- Life cycle hypothesis.	8	5
	3.2	Investment-Types-Theories of investment-Accelerator theory- Tobin's q-theory - MEI.	7	5
	1. Study the consumption behavior of the neighbourhood 2. Analyse the investment trends and patterns of any industry			3
<b>4</b>	<b>Macroeconomic Challenges</b>		15	
	4.1	Inflation and Unemployment: different types - Money and inflation- Policy dilemma : the Phillips Curve – Stagflation and the failure of Phillips curve – Keynesian crisis.	8	6
	4.2	Fiscal Policy vs Monetary Policy – Tools – Active vs Passive policy making.	7	6

	Assess the measures to control inflation.			
5	Teacher Specific Module			
Teaching and Learning Approach	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning : Traditional lectures can provide solid factual knowledge Active – interactive learning, brainstorming, seminar, group activities : Foster student engagement through interactive class discussions			
	<b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>• CD1-Lecture by use of boards /LCD projectors / Projectors etc.</li><li>• CD2- Tutorials/Assignments</li><li>• CD3-Class Seminars</li><li>• CD4-Peer group Discussions</li></ul>			
	<b>MODE OF ASSESSMENT</b>			
	<b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b>			
	<b>Components of CCA</b>			
	ClassTests			
	Assignments			
	Seminar/Viva			
Project/Practicum/Quiz/BookReview/Fieldwork.				
	<b>B. End Semester Examination (ESE) : 70 marks; Time 2 hours.</b>			
	<b>End Semester Examination (ESE) 2 Hours</b>			
	<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	30 words	10 out of 15	10x2=20
	Short Essay	150 words	10 out of 15	10x5=50
	<b>Total Marks</b>			<b>70</b>

### References

1. Abel, Andrew B. *Macroeconomics*. Pearson, Delhi, 2011.
2. Diulio, Eugene. *Macroeconomics–Schaum's Outline Series*. Tata McGraw Hill, New Delhi, 2004.
3. Ackley, Gardner. *Macroeconomics : Theory and Policy*. Macmillan, 1978.
4. Mukerjee, Sampat . *Analytical Macroeconomics : From Keynes to Mankiw*. New Central Book Agency, Calcutta, 2008.
5. Froyen, Richard T. *Macroeconomics : Theories and Policies* (Recent edition). Pearson Education.
6. Shapiro, Edward. *Macroeconomic Analysis*. Galgotia Publications, 1982.
7. Mankiw, N. Gregory. *Macroeconomics* (Recent edition). Worth Publications, New York.

### **Suggested Readings:**

1. O'Sullivan, Arthur,etal. *Macroeconomics Principles, Applications and Tools*. New Delhi: Pearson Education South Asia, 2015.
2. Snowdon, B.,and Howard Vane. *A Modern Guide to Macroeconomics*. Edward Elgar.
3. Natrass, Nicoli, and G.VisakhVerma. *Macroeconomics Simplified: An Introduction to Keynesian and Classical Macroeconomic Systems*. Sage, New Delhi, 2014.
4. Dornbusch,R.,andS.Fisher.*Macroeconomics*.TataMcGraw Hill.



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<b>Programme</b>	<b>BA(Hons)Economics</b>					
<b>Course Name</b>	<b>QuantitativeEconomics-II</b>					
<b>Type of Course</b>	<b>DSCA</b>					
<b>Course Code</b>	<b>UC4DSCECO201</b>					
<b>Course Level</b>	<b>200-299</b>					
<b>Course Summary</b>	This course is designed to equip learners with the fundamental statistical tools used in economic analysis. This course also aims at empowering students with the basic requirements for analysing economic data.					
<b>Semester</b>	4	<b>Credits</b>			4	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>	
		3	1	1		75
<b>Pre-requisites, if any</b>						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Understand the fundamentals of statistical analysis.	U	1
2	Appreciate the need for statistical analysis in Economics.	Ap	2
3	Apply the statistical tools in formulating simple models.	A	10
4	Analyse economic relationships and real – life problems using learnt tools.	An	2
*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

#### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>		<b>Fundamentals of statistics for economic analysis</b>	22	
	1.1	Statistics-meaning and methodology	1	1

	1.2	Data: types, scales of measurement, collection techniques, census and sampling, Sample designs – Random sampling and Non-random sampling (SRS, systematic, stratified, cluster and multistage sampling)	4	2
	1.3	Classification, Tabulation and Presentation of data : Histogram, Polygon, frequency curve, Bar chart, Pie diagram, Ogives	2	2
	1.4	Index Numbers : Different types, construction, CPI and WPI as index numbers, deflating, splicing and Base shifting	2	1,4
	1.5	Time series : meaning, definition, uses, components – additive and multiplicative models, measurement of trend- free hand method, semi average, moving average and least square methods – examples of different time series from economics (GDP, inflation, stock prices, unemployment rate, exchange rate etc.)	5	2
<b>Practicum</b>		1. Discussion on the relevance of statistical analysis in economics 2. Discussion on the use of different indices, especially in the context of policy formulation (eg. declaration of DA, stock indices etc.) 3. Identifying patterns of different economic time series and comparing their time plots	8	1, 2
<b>2</b>	<b>Descriptive measures</b>		22	
	2.1	Central Tendency and its measures (properties, merits and demerits) : arithmetic mean, median, mode, geometric mean and harmonic mean.	4	1
	2.2	Dispersion and its measures (properties, merits and demerits): absolute and relative measures :- Range, Mean Deviation, Standard Deviation and Quartile Deviation, Variance, Coefficient of Variation.	6	2
	2.3	Skewness and Kurtosis (concept and significance only and measurement not required)	4	1
<b>Practicum</b>		1. Illustrate the measures of central tendency and dispersion using cross-sectional GDP data of different countries that can be obtained from world bank database. Also show the time series case with Indian data	8	2
<b>3</b>	<b>Introduction to probability distributions</b>		17	
	3.1	Random Variables; Discrete and Continuous	1	1
	3.2	Probability Mass Function and Probability Density Function:- Meaning and significance	2	2
	3.3	Binomial and Normal Distributions:- Properties and uses	1	2
	3.4	Estimation of probabilities using standard normal table	2	3
	3.5	Other important distributions t, F and Chi- square (properties only)	3	1
<b>Practicum</b>		1. Using relevant examples discuss the importance of probability distributions	8	2



4	Correlation and Regression Analysis		14																					
	4.1	Correlation- significance and types– measurement: scatter diagram,Karl Pearson’s correlation coefficient, (for ungrouped Data only) and Rank correlation.	5	1,4																				
	4.2	Regression – meaning and significance, measurement of coefficients and its applications	2	2																				
	4.3	Relation between correlation and regression.	1	2																				
Practicum	1.Illustrate using any sample data from economics, how correlation and regression can be used for analysing relationships.		6	2																				
5	Teacher Specific Module																							
Teaching and Learning Approach	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning : Traditional lectures can provide solid factual knowledge Active – interactive learning, brainstorming, seminar, group activities : Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>• CD1-Lecture by use of boards /LCD projectors / Projectors etc.</li><li>• CD2- Tutorials/Assignments</li><li>• CD3-Class Seminars</li><li>• CD4-Peer group discussions</li></ul>																							
Assessment Types	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table><tr><td colspan="4">Components of CCA</td></tr><tr><td colspan="4">ClassTests</td></tr><tr><td colspan="4">Assignments</td></tr><tr><td colspan="4">Seminar/Viva</td></tr><tr><td colspan="4">Project/Practicum/Quiz/Book Review/Fieldworketc.</td></tr></table>				Components of CCA				ClassTests				Assignments				Seminar/Viva				Project/Practicum/Quiz/Book Review/Fieldworketc.			
Components of CCA																								
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Total Marks			70																					

### **Reference**

1. Keller,G.(2014).*Statistics for Management and Economics.Cengage Learning*
2. Stephens,L.,&Spiegel,M.(2014).*Schaum's Outline of Statistics,5thEdition.McGraw-Hill Education.*
3. Ralph,J.,O'Neill,R.,&Winton,J.(2015).*A practical introduction to index numbers.* John Wiley & Sons.
4. McClave,J.T.,Benson,P.G.,&Sincich,T.(2018).*Statistics for Business and Economics, Global Edition.*
5. Mendenhall,W.,Beaver,B.M.,&Beaver,R.J.(2019).*Introduction to probability and statistics.*

### **Suggested Readings:**

1. Moore, David S.,etal.(2021),*The Basic Practice of Statistics.*



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<b>Programme</b>	<b>BA(Hons)Economics</b>				
<b>CourseName</b>	<b>Exploring Economic Data Analytical Tools</b>				
<b>TypeofCourse</b>	<b>DSE</b>				
<b>CourseCode</b>	<b>UC4DSEECO200</b>				
<b>CourseLevel</b>	<b>200-299</b>				
<b>Course Summary</b>	This course is designed to familiarise learners with various software tools available for analysing data. The course emphasizes hands-on applications such as data exploration, visualization, and interpretation using different environments and thus extracts meaningful insights from datasets. The course equips them to contribute effectively to economic decision-making, market research, and policy formulation in An increasingly data – centric environment.				
<b>Semester</b>	<b>4</b>	<b>Credits</b>			<b>4</b>
<b>CourseDetails</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>
	Authentic, Collaborative, and Case - based learning	<b>3</b>		<b>1</b>	
<b>Pre-requisites, if any</b>					

### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the students will be able to:</i>	<b>Learning Domains *</b>	<b>PO No</b>
1	Understand the basic features of various softtools used for data analysis in economics	U	1
2	Apply the learnt tools for basic univariate data analysis	A	2
3	Understand the importance of various steps involved in analysing data and the uses of the learnt tools in facilitating these processes	U	2
4	Create simple statistical models that enable economic analysis	C	2

*\*Remember(K), Understand(U),Apply(A),Analyse(An),Evaluate(E),Create(C),Skill(S),Interest (I)and Appreciation(Ap)*

**COURSE CONTENT**  
**Content for Classroom Transactions (Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Introduction to SPSS</b>		<b>15</b>	
	1.1	Need and importance of software tools in data analysis– choosing the right software - efficiency and accuracy in data processing - advanced statistical and graphical capabilities - handling large datasets	3	1
	1.2	Overview of SPSS-Common use cases in economics and social sciences - Key features - User-friendly interface - Extensive library of statistical tests - Data visualization tools - Advantages and limitations	3	1,2,34
	1.3	Measures of central tendency and dispersion(Mean, median, mode, range, standard deviation, variance) – Graphical representation of data – Creating and interpreting histograms, pie charts, bar charts - Data visualization tools in SPSS - Customizing graphs and charts - Using SPSS’s built-in graphing tools	4	1,2,34
<b>Practicum:</b>	1. Hands-on session with SPSS – importing data from various sources (e.g., Excel, CSV), data cleaning and preparation - calculating descriptive statistics - interpreting results 2. Visualization and interpretation of results using a sample dataset		5	1,2,34
<b>2</b>	<b>Fundamental Data Analysis with GRETL and EVIEWS</b>		<b>18</b>	
	2.1	Overview of GRETL – history and primary uses in economics -key features – advantages and limitations – GRETL interface and basic commands - Navigating the GRETL workspace - commonly used commands and functions	5	1,2,34
	2.2	Introduction to EVIEWS - Development and common applications – key features – advantages and limitations- EVIEWS interface and basic operations – Basic data operations and descriptive statistics	5	1,2,34
<b>Practical</b>	1. Hands-on session in GRETL- importing and managing datasets- basic data manipulation and analysis 2. Hands-on session in EVIEWS – conducting basic statistical analysis 3. Comparative analysis using GRETL and EVIEWS - similarities and differences in workflows - practical examples comparing		8	1,2,34

	Outputs from both tools			
<b>3</b>	<b>Introduction to STATA and SAS</b>		<b>15</b>	
	3.1	Introduction to STATA - key features - advantages and limitations-data management and manipulation in STATA- importing and cleaning data - data transformation and preparation	5	1,2,34
	3.2	Overview of SAS – history and common uses – key features- advantages and limitations – SAS interface and programming basics - navigating the SAS environment - Basic SAS programming syntax	4	1,2,34
<b>Practicum</b>	1. Hands-on session in STATA – data transformation and handling- conducting basic descriptive analysis 2. Hands-on session in SAS – data handling and cleaning 3. Analysing a sample dataset using both STATA and SAS – doing a comparison and integrating the results		6	1,2,34
<b>4</b>	<b>Data Science Applications with R and Power BI</b>		<b>27</b>	
	4.1	Introduction to R – development and key applications in data science - key features - extensive package ecosystem - advantages and limitations - R Studio interface and functionalities –basics of R programming – syntax and basic commands – fundamental statistical analysis using R	8	1,2,34
	4.2	Significance of visualisation in data analysis - overview of Power BI - development and main uses in business intelligence - key features - advantages and limitations – creating interactive dashboards in Power BI – data import and transformation- visualization and dashboard creation	8	1,2,34
<b>Practicum</b>	1. Hands-on session in R- data import, cleaning, and basic analysis – useful libraries - creating visualizations with ggplot2 2. Hands-on session in PowerBI – building and customizing interactive dashboards 3. Mini project combining R and Power BI - Data analysis and reporting task using R - Visualization and presentation using Power BI		11	1,2,34
<b>V</b>	<b>Teacher Specific Module</b>			
<b>Teaching and Learning Approac</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning : Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities : Foster student			

<b>h</b>	engagement through interactive class														
	discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>○ CD1-Lecture by use of boards/LCDprojectors/Projectors etc.</li><li>○ CD2-Tutorials/Assignments</li><li>○ CD3-Peer teaching</li></ul>														
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 25 Marks</b> <table><tr><td colspan="4"><b>Components of CCA</b></td></tr><tr><td colspan="4">Class Tests, Industry Visit Report, Mini Project, Industry Collaboration Report,Assignments, Seminar/Viva, Project/Quiz/Book Review/Fieldwork etc.</td></tr></table>		<b>Components of CCA</b>				Class Tests, Industry Visit Report, Mini Project, Industry Collaboration Report,Assignments, Seminar/Viva, Project/Quiz/Book Review/Fieldwork etc.								
	<b>Components of CCA</b>														
	Class Tests, Industry Visit Report, Mini Project, Industry Collaboration Report,Assignments, Seminar/Viva, Project/Quiz/Book Review/Fieldwork etc.														
	<b>A. End Semester Examination(ESE) : 50 marks; Time 1 hour and 30 minutes.</b>														
	<b>End Semester Examination (ESE) 1 Hour and 30 minutes</b>														
	<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>											
	Short Answer	30 words	10 out of 15	10x2=20											
	Short Essay	150words	6 out of 10	6x5=30											
	<b>Total Marks</b>			<b>50</b>											
	<b>II. Practical Examination : 50 marks</b> (A. Continuous Comprehensive Assessment (CCA) : 15 marks, B. End Semester Examination(ESE):35 marks). <b>A. Continuous Comprehensive Assessment (CCA) : 15 marks.</b>														
<b>A. Continuous Comprehensive Assessment (CCA)</b> <table><tr><td colspan="4"><b>Components</b></td></tr><tr><td colspan="4">Industry Risk Analysis Report, Industry Project Collaboration Report, Hackathon Report, Proto typing of a Risk Analysis scenario for a particular firm, Lab based exercises, Presentation/Seminar.</td></tr><tr><td colspan="4"><b>Total Marks</b></td></tr></table>			<b>Components</b>				Industry Risk Analysis Report, Industry Project Collaboration Report, Hackathon Report, Proto typing of a Risk Analysis scenario for a particular firm, Lab based exercises, Presentation/Seminar.				<b>Total Marks</b>				
<b>Components</b>															
Industry Risk Analysis Report, Industry Project Collaboration Report, Hackathon Report, Proto typing of a Risk Analysis scenario for a particular firm, Lab based exercises, Presentation/Seminar.															
<b>Total Marks</b>															


<b>B.End Semester Examination (ESE) : 35 marks (1 hour)</b>				
<b>End Semester Examination (ESE)</b>				
<b>Type</b>		<b>Marks</b>		
Lab based tests.		35		
<b>Total Marks</b>		<b>35</b>		

### Reference

1. Field,AndyP. *Discovering Statistics Using IBM SPSS Statistics*.NewDelhi,India,Sage Publications, 2020.
2. Morgan,George A. *IBM SPSS for Introductory Statistics : Use and Interpretation*.NewYork,Ny, Routledge, 2020.
3. Adkins,LeeC. *Using Gretl for Principles of Econometrics*.5thed.,Nov.2018.
4. <https://evIEWS.com/Learning/index.html>
5. Daniels,Lisa, and Nicholas Minot. *An Introduction to Statistics and Data Analysis Using Stata®*. SAGE Publications, 11 Jan. 2019.
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8. Field,Andy,etal.*Discovering Statistics Using R*.Thousand Oaks,Sage/Texts,2022.
9. Hyman, Jack A. *Microsoft Power Bi for Dummies*,2022.
10. Knight,Devin.*Microsoft Power BI Complete Reference*.Dec.2018.

### Suggested Readings:

1. Pallant, Julie. *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS*. 7thed., S.L., Open Univ Press, 2020.
2. Moore,DavidS.,etal.(2021),*TheBasicPracticeofStatistics*.
3. Keller,G.(2014).*StatisticsforManagementandEconomics*.CengageLearning

<div>Est. in 1921</div> <div></div>		<div>UNION CHRISTIAN COLLEGE, ALUVA</div>				
Programme	BA(Hons)Economics					
Course Name	Financial Risk Analysis					
Type of Course	DSE					
Course Code	UC4DSEECO201					
Course Level	200-299					
Course Summary	This course is designed to provide basic knowledge about financial risk analysis for different types of entities. The primary objective is to facilitate basic knowledge in risk management at an entry level so that later, the students can make analytical exercises in a practical environment. Since risk analysis has crucial applications in enterprise management, especially banks and NBFCs, this paper tries to provide area specific knowledge so that they can acquire the skill from various risk analysis tools for their further studies.The course should be delivered with the support of lab sections for the relevant topics.					
Semester	4	Credits			4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		3		1		
Pre-requisites ,if any	Knowledge in microeconomics and macroeconomics					

#### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the learner will be able to:</i>	Learning Domains *	PONo
1	Understand the significance of economic and financial risk management.	U	1,2,3,9,10.
2	Apply the various risk management tools.	An	2,3,9,10
3	Generate skills in risk assessment and management.	S	2,3,9,10
4	Understand the risk environment of financial entities and corporate.	U	2,3,9,10
<b>*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest (I) and Appreciation (Ap)</b>			



**COURSE CONTENT**  
**Content for Classroom transaction (Units)**

Module	Units	Course Content	Hrs	CONo.
<b>1</b>		<b>Introduction to Risk Analysis</b>	<b>22</b>	
	1.1	Understanding Risk: Definition and Types-importance of Risk Management in Finance-Components of financial risk-Need for macroeconomic risk analysis and macrofinancial risk analysis.	5	1
	1.2	Credit risk assessment-Counter party risk in the financial sector-Hedging-Balancing risk and returns.	2	1
	1.3	Foreign exchange risk, commodity price risk and interest rate risk: Meaning and measurement.	2	1
	1.4	Technological change and risk in the era of digitalisation/automation- Technological obsolescence-Need for technological improvement and adaptation.	3	1
	<b>Practicum</b>	1. Map out the various macroeconomic or macrofinancial risk factors affecting financial sector entities. 2. Illustrate the significance of commodity price risk for industrial sector firms. 3. Outline the various technological change risks emanating from technological disruptions including AI.	10	1
<b>2</b>		<b>Financial Economics and Risk Analysis</b>	<b>25</b>	
	2.1	Different statistical risk analysis tools for financial institutions, corporate and digital enterprises (overview only)-Steps for the creation of Risk Matrix using a DBMS.	3	2,3
	2.2	Time Value of Money : Future Value, Present Value, Valuation of annuities and perpetuities-NPV, IRR using spreadsheet like excel-Importance of forecasting and budgeting models for risk analysis- Scenario analysis for future risk situations.	5	2,3
	2.3	Value At Risk (VaR) and Conditional Value at Risk(CVaR)-Bloomberg Terminal, @Risk (excel) (Bloomberg Terminal and @Risk can be at introductory level).	4	2,3
	2.4	Monte Carlo Simulations (introductory level)-Decision Tree Analysis-Sensitivity Analysis-Failure Mode and Effect Analysis (FMEA).	3	2,3
	<b>Practicum</b>	1. Frame decision tree analysis related to a financial or corporate decision. 2. Conduct a model risk analysis using @ risk. 3. Attend an online course/class on Bloomberg terminal or Monte Carlo Simulations and write a report containing step by step procedure for the analysis. 4. Conduct a risk analysis using a risk matrix.	10	2, 3

3		<b>Financial Sector Risk Analysis</b>	<b>17</b>	
	3.1	The conceptual components regarding the operational environment of a financial entity-Balance sheet-Assets and liabilities-Importance of liquidity-NPAs-CRAR-Return on Assets-CD Ratio-leverage.	3	1,4
	3.2	Financial Risk Analysis: Market Risk, Credit Risk,Operational and Liquidity Risk-Case Studies of Financial Stability Risks-(eg: SVB, Yes Bank, Northern Rock).	3	1,4
	3.3	Liquidity Risk -Importance of liquidity risk for banks - Managing liquidity risk-Measuring liquidity risk: liquidity ratio.	2	1,4
	3.4	RBI's Regulatory and Supervisory frameworks in India regarding risk management: Risk weights-Risk based supervision (SPARC).	2	1,4
	<b>Practicum</b>	1. Chart out the various regulatory and supervisory norms by the RBI for Financial entities in India. 2. Outline the significance of liquidity risk and operational risk related to banks and NBFCs based on the recent financial sector occurrences. 3. Illustrate the principle behind risk based supervision.	7	1,3,4
	<b>4</b>	<b>Corporate Risk Analysis</b>	<b>11</b>	
	4.1	Corporate balancesheet components and their significance in risk assessment.	1	1,4
	4.2	Corporate Risk: Strategic Risk, Innovation and Technology adaptation Risk, Operational Risk, Financial Risk and Project Risk.	3	1,4
	4.3	Cyber security Risk, Supply Chain Risks-Insurance as a mechanism for risk mitigation.	2	1,4
	4.4	Key Risk Indicators (KRIs)-Key Performance Indicators (KPIs)-Significance of Corporate Governance.	2	1,4
	<b>Practicum</b>	Prepare a mind map analysis of the various corporate risk factors.	3	4
<b>5</b>	<b>Teacher specific Module</b>			

Teaching and Learning Approach	<b>Suggested Classroom Procedure (Mode of transaction)</b> <b>CD 1- Lecture-Based Instruction:</b> Conventional lecture format can be used to introduce and explain the risks and related concepts. <b>CD 2 - Case Study Analysis:</b> For the assessment of diverse risk scenarios, case studies including financial crisis, regulatory issues etc. can be provided on case study mode. <b>CD 3 - Group Discussions:</b> Facilitate group discussions to analyse the diverse risk operations using different tools. <b>CD 4 - Interactive Workshops:</b> For analysing the risk tools, Interactive Workshops can be made. <b>CD 5 - Analytical exercises and Simulations:</b> For understanding various risk tools and simulations, analytical exercises can be made using computer lab. <b>CD -6: Industry-Academia interaction sessions–</b> Some of the topics in the course can be better delivered with the collaboration of the industry as it needs real world applications of higher order. Therefore, industry participation is highly desirable and can be done in the form of Seminars, Workshops etc. <b>CD7:Report presentation :</b> after making a study on the financial sector firm.		
Assessment Types	<b>MODE OF ASSESSMENT</b> <b>I.Theory–75 marks (A. Continuous Comprehensive Assessment(CCA) : 25marks, B. End Semester Exam (ESE): 50 marks).</b> <b>A.Continuous Comprehensive Assessment (CCA) : 25marks.</b>		
	<b>A.Continuous Comprehensive Assessment (CCA)</b>		
	Components	Marks	
	Lab based exercises, Risk assessment of an MSME/ local business enterprise project, Mini Project, Open Book test, Industry Visit Report, Industry Expert Interaction Report,Case Study Report of a Firm or business enterprise,Class test, Presentation/Seminar, Assignments.	25	
	<b>Total Marks</b>		<b>25</b>

**B.End Semester Examination (ESE) : 50 marks; Time 1 hour and 30 minutes.**

End Semester Examination (ESE) 1 Hour and 30 minutes			
Descriptive type	Word Limit	Number of questions to be answered	Marks
Short Answer	30 words	10 out of 15	10x2=20
Short Essay	150words	6 out of 10	6x5=30
Total Marks			50

**II. Practical Examination : 50 marks** (A.Continuous Comprehensive Assessment (CCA):15 marks, B. End Semester Examination (ESE): 35 marks).

**A. Continuous Comprehensive Assessment (CCA) : 15 marks.**

A. Continuous Comprehensive Assessment(CCA)	
Components	Marks
Industry Risk Analysis Report, Industry Project Collaboration Report, Hackathon Report, Prototyping of a Risk Analysis scenario for a particular firm, Lab based exercises, Presentation/Seminar.	15
<b>Total Marks</b>	<b>15</b>

**B. End Semester Examination (ESE) : 35 marks (1hour)**

End Semester Examination (ESE)	
Type	Marks
Lab based tests.	35
<b>Total Marks</b>	<b>35</b>

## References

1. Dr.D.D.Mukherjee, Credit Appraisal, Risk Analysis & Decision-Making,Snow-whitePublication Pvt. Ltd, 2023.
2. Dean H. Stamatis, Risk Management Using Failure Mode and Effect Analysis (FMEA), ASQ Quality Press, 2019.
3. Terje Aven, Risk Analysis,Wiley,2022.
4. David Vose, Risk Analysis:A Quantitative Guide,Wiley,2012.
5. Charles Yoe, Principles of Risk Analysis: Decision Making Under Uncertainty, CRC Press,2019.
6. Judea Pearl and Dana Mackenzie, The Book of Why. The New Science of Cause and Effect, Penguin, 2018.
7. Michael Rees, Business Risk and Simulation Modelling in Practice: Using Excel, VBA and@RISK, Wiley, 2015.
8. MichelCrouhy(Author),DanGalai,The Essentials of Risk Management,SecondEdition, McGraw-Hill Education, 2014.
9. ThomasColeman,A Practical Guide to Risk Management,CFA,2011.
10. Allen S, John, Financial Risk Management A Practitioners Guide to Managing Market andCredit Risk, Second Edition, Wiley, 2013.
11. IIBF,Risk Management, Macmillan, 2023.
12. JohnC.Hull,Risk Management and Financial Institutions,JohnWiley&Sons,2015.
13. Philippe Jorion, Value at Risk, 3rd Ed.: The New Benchmark for Managing Financial Risk, 2006.
14. Jimmy Skoglund (Author), Wei Chen,Financial Risk Management: Applications in Market, Credit, Asset and Liability Management and Firmwide Risk, Wiley, 2015.
15. GeorgesDionne,Corporate Risk Management,Wiley,2021.

## SUGGESTED READINGS

1. ArindamBandyopadhyay,Basic Statistics for Risk Management in Banks and Financial Institutions, OUP Oxford, 2022.

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Programme	BA(Hons) Economics					
Course Name	Insurance and Marketing					
Type of Course	DSE					
Course Code	UC4DSEECO202					
Course Level	200-299					
Course Summary	This course is designed to equip learners with the fundamental marketing tools used in insurance products marketing. This course also aims at formulating effective marketing plans tailored to insurance products.					
Semester	4	Credits			4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical/ Practicum	Others	
		3	1	1	75	
Pre-requisites,if any						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains*	PONo
1	Understanding the fundamentals of marketing principles in insurance products marketing.	U	PO1
2	Exploring the role of marketing strategies in the insurance industry and developing skills in market segmentation and targeting	S	PO2, PO10
3	Analysing the relationship between insurance and consumer behaviour.	An	PO1, PO2, PO6
4	Demonstrating proficiency in communication and sales techniques in insurance and formulating effective marketing plans tailored to insurance products.	C	PO4, PO10
5	Applying the digital marketing principles in insurance marketing.	A	PO9
*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest(I) and Appreciation(Ap)			

**COURSE CONTENT**  
**Content for Classroom Transactions (Units)**

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Introduction to Insurance and Marketing</b>		19	
	1.1	Meaning and Importance of Insurance	1	1
	1.2	History and evolution of the Insurance Industry.Types of Insurance- Life and Non-life. Regulatory environment-IRDA	5	1
	1.3	An overview of marketing principles. Marketing mix- product, price, place, promotion	2	2
	1.4	Market segmentation and Targeting	2	2
	1.5	Branding and Positioning Strategies	2	2
<b>Practicum:</b>	1. Discussion on the importance of insurance marketing 2. Discussion on developing different segments for insurance markets 3. Discussion on market targeting and market positioning		7	1
<b>2</b>	<b>Consumer behavior and Market Research</b>		17	
	2.1	Consumer behavior and its importance in insurance marketers	3	1
	2.2	Factors influencing consumer behaviour— personal- psychological-economic-cultural-social factors	3	2
	2.3	Market Research- meaning and scope. Market Research Process.	3	3
<b>Practicum</b>	1. Prepare a questionnaire for conducting market research relating to insurance. 2. Discussions on different factors influencing consumer behaviour for insurance products.		8	3
<b>3</b>	<b>Insurance Products and Services</b>		18	
	3.1	Life and Non-life Insurance products and their features. Types of marketing systems in insurance.	2	2
	3.2	Underwriting and Risk assessment process. Pricing and underwriting.Factors influencing insurance premiums- Underwriting guidelines and processes.	6	3
	3.3	Insurance products distribution channels - Agents, brokers, direct sales and digital distribution	3	4
<b>Practicum</b>	1. Discussions on various insurance products. 2. Discussions on digital distribution channels of insurance products.		7	5
<b>4</b>	<b>Marketing Communications and Technological Advancements</b>		21	

	4.1	Marketing communication and its process. Promotional mix elements. Integrated marketing tools used in insurance.	5	4																																
	4.2	Advertising and sales promotion. Ethical issues in insurance marketing and sales.	3	2																																
	4.3	Technological advancements in insurance marketing- Impact of AI, Data Analytics and insure Tech.	5	5																																
<b>Practicum:</b>	1. Discussions on integrated marketing tools and prepare an integrated communication tool for selling insurance. 2. Conduct a mini survey to find out the impact of technological advancement on insurance product selling.		8	5																																
<b>5</b>	<b>Teacher Specific Module</b>																																			
<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning : Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities : Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>o CD1-Lecture by use of boards / LCD projectors/Projectors etc.</li><li>o CD2- Tutorials/Assignments</li><li>o CD3-Class Seminars</li><li>o CD4-Peer group discussions</li></ul>																																			
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA)– 30 Marks</b> <table><tr><th colspan="4">Components of CCA</th></tr><tr><td colspan="4">ClassTests</td></tr><tr><td colspan="4">Assignments</td></tr><tr><td colspan="4">Seminar/Viva</td></tr><tr><td colspan="4">Project/Practicum/Quiz/Book Review/Field worketc.</td></tr></table> <b>B.End Semester Examination(ESE):70 marks; Time 2 hours.</b> <table><tr><th colspan="4">End Semester Examination (ESE) 2 Hours</th></tr><tr><th>Descriptive type</th><th>Word Limit</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>Short Answer</td><td>30 words</td><td>10 out of 15</td><td>10x2=20</td></tr></table>				Components of CCA				ClassTests				Assignments				Seminar/Viva				Project/Practicum/Quiz/Book Review/Field worketc.				End Semester Examination (ESE) 2 Hours				Descriptive type	Word Limit	Number of questions to be answered	Marks	Short Answer	30 words	10 out of 15	10x2=20
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End Semester Examination (ESE) 2 Hours																																				
Descriptive type	Word Limit	Number of questions to be answered	Marks																																	
Short Answer	30 words	10 out of 15	10x2=20																																	



Short Essay	150words	10 out of 15	10x5=50
<b>Total Marks</b>			<b>70</b>

### Reference

1. Rejda,E.George(2011).*Principles of Risk Management and Insurance*,firstedition'Pearsons Education ,Delhi.
2. Kotler,Kevin, Jha&Koshi(2009), *Marketing Management*, Pearson Education,Delhi
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5. Kotler,Philip,(1996), *Marketing Management - Analysis, Planning, Implementation and Control*, 8<sup>th</sup> Edition, Prentice Hall of India.
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<b>Programme</b>	<b>BA(Hons) Economics</b>				
<b>Course Name</b>	<b>Economics of Innovation and Entrepreneurship</b>				
<b>Type of Course</b>	<b>DSE</b>				
<b>Course Code</b>	UC4DSEECO203				
<b>Course Level</b>	<b>200-299</b>				
<b>Course Summary</b>	<p>This course provides a comprehensive understanding of Innovation, Entrepreneurship and practical application of the innovation process equipping students with the knowledge and skill needed to navigate the dynamic business landscape. The course begins with an exploration of innovation, where students analyze the current business landscape and recognize the significance of innovation, including its diverse types and specific needs within India. Intellectual Property Rights (IPR) are addressed in detail, focusing on their crucial role in protecting innovative ideas through patents and copyrights. It also equips students with knowledge of both traditional and contemporary financing options, ensuring a comprehensive understanding of financial mechanisms crucial for entrepreneurial ventures. The Introduction to Entrepreneurship module cultivates an entrepreneurial mindset, introduces startup concepts, and explores different forms of ownership. The practical Application of the Innovation Process is emphasized through critical thinking, ideation, and hands-on experiences like field visits to startup units, enabling students to develop valuable skills for navigating the dynamic business</p>				
<b>Semester</b>	4	<b>Credits</b>			<b>Total Hours</b>
<b>Course Details</b>	Learning Approach	Lecture	Tutorial	Practical	Others
		3		1	
<b>Pre-requisites, if any</b>					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Understand the concepts of innovation, entrepreneurship and start up.	U	1,6
2	Analyse the importance and methods of applying and holding Patents and Copyrights.	An	2,9
3	Identify the various financial sources for entrepreneurs.	An	2,9
4	Demonstrate the acquisition of knowledge and problem-solving capabilities of students in innovation.	S	5,10
5	Gain an insight into the concept of student innovators.	I	4,10
6	Evaluate the environment for facilitating a start-up unit.	E	6,9
*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S) , Interest (I) and Appreciation(Ap)			

### COURSE CONTENT

#### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1		<b>Introduction to Innovation</b>	19	
	1.1	Defining the concept of innovation and analyzing the Significance and prospects of Innovation In the present economic scenario- Types of Innovation-Innovation Needs of India-Economic Impact of Innovation -critical analysis	5	1
	1.2	IPR- concept-Importance of IPR in Innovation-Types Of IPR- Patents And Copyrights – relevance and significance- Patents And Copyrights In India	2	2
	1.3	Arrangement of Funds- Traditional Sources of Financing, Loan Syndication, Self-Financing, Consortium Finance. Role played by Banks-Appraisal of Loan Applications by Financial Institutions.	3	3
	<b>Practicum</b>	Scenario:Students can be considered as a team of entrepreneurs with a novel business idea Task: Identify the different types of intellectual property (IP) potentially involved in the idea.Research the registration process for relevant IPRs in India .	9	3
2		<b>Introduction to Entrepreneurship</b>	22	

	2.1	Entrepreneurial Mindset And Traits-Opportunity Recognition- Development of Knowledge And Skills In Launching New Ventures-Design Thinking And Entrepreneurship-Entrepreneur's Role,Task and Personality-Types of Entrepreneurships-Economic significance/Importance of Entrepreneurship	5	1
	2.2	Introduction To Start Up Ventures-Procedure To Commence A Startup-Forms Of Ownership - Sole Proprietorship; Partnership; Limited Liability Partnership and Corporation Form of Ownership- Advantages/Disadvantages-Lean Start Ups	5	6
	2.3	Student Entrepreneurs -role and significance - Opportunities, Benefits and challenges faced by student entrepreneurs-Case studies	3	5
	<b>Practicum</b>	<p>Allow the students in participating in a design thinking challenge focused on a specific theme (e.g., sustainability, education technology)</p> <p>The students should be able to</p> <ol style="list-style-type: none"> <li>1. Define the problem statement clearly, focusing on the specific challenge or opportunity you identified.</li> <li>2. Develop creative solutions through brainstorming and prototyping.Consider the feasibility and potential impact of ideas.</li> </ol> <p>Pitch solution to a panel of judges, if possible explaining how it addresses the identified opportunity and benefits the target audience.</p> <p>These can be done as classroom or outside activity.</p>	9	5
<b>3</b>	<b>Application of Innovation</b>		19	
	3.1	Critical Thinking-Out of Box Approach-creativity and innovation- Ideation And Idea Generation, Business Canvas Model, Pitch Desk, Assessing Market Demand and Feasibility, Prototyping, Concept Testing, Value Proposition-Your Ideas-Presentation (based on Innovation steps )	8	4
	3.2	Meaning and Importance of Project Report- Contents of a DPR- Guide lines for formulating a DPR	2	4
	<b>3.3</b>	Startups-Basics and challenges	3	6
	<b>Practicum</b>	Visit To A Startup Unit—Develop A Project Report On the risk, benefits and Challenges Faced By The Unit.	6	6
<b>4</b>	<b>Innovative Ventures</b>		15	
	4.1	Innovating for Social Causes – Growth Strategies for Innovative Ventures	3	4
	4.2	Managing risk and uncertainty in innovation, measuring	3	4

		innovation success-New Product development and testing		
	4.3	Managing Innovation and Building an Innovative Culture - Creating an Action Plan for Building an Innovative Culture	3	6
	<b>Practicum</b>	Identify key uncertainties related to firms and present a report on how it is managed	6	4,6
<b>5</b>	<b>Teacher specific Module</b>			

AssessmentTypes	<b>MODE OF ASSESSMENT</b>	
	<b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b>	
	<b>Components of CCA</b>	
	ClassTests	
	Assignments	
	Seminar/Viva	
	Project/Practicum/Quiz/Book Review/Field worketc.	
<b>B.End Semester Examination (ESE) :70marks; Time 2 hours.</b>		



End Semester Examination (ESE) 2 Hours			
Descriptive type	Word Limit	Number of questions to be answered	Marks
Short Answer	30 words	10 out of 15	10x2=20
Short Essay	150words	10 out of 15	10x5=50
Total Marks			70

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26. Tidd,Joe,andJohnBessant.\*ManagingInnovation:IntegratingTechnological,Marketand Organizational Change\*. John Wiley & Sons, 2018.
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28. VijayaKumarIvaturiandGanesh,M.\*TheManualforIndianStart-ups\*.PenguinRandom House India, 2017.
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### **Suggested Readings:**

1. Agarwal,Rajshree,andSonaliK.Shah."Knowledgesourcesofentrepreneur ship:Firmformation by academic, user and employee innovators." \*Research Policy\*, vol. 43, no. 7, 2014, pp. 1109- 1133. doi:10.1016/j.respol.2014.04.012
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<div>Est. in 1921</div> <div></div>	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>	<b>BA(Hons)Economics</b>					
<b>CourseName</b>	<b>Agricultural Economics</b>					
<b>TypeofCourse</b>	<b>DSE</b>					
<b>CourseCode</b>	<b>UC4DSEECO204</b>					
<b>CourseLevel</b>	<b>200-299</b>					
<b>CourseSummary</b>	This course covers the fundamental concepts in agricultural economics, emphasizing their interconnectedness with the agricultural sector's development, and explores the historical context of agricultural development, examining the transition of production relations in the agricultural sector from pre-capitalism/feudalism to capitalism. Additionally, the course equips students with the ability to analyze agricultural market dynamics and trends, facilitating informed decision-making in crop selection, production, and sales, while also nurturing entrepreneurial skills in agribusiness management with a focus on local knowledge and sustainable practices within the agricultural sector.					
<b>Semester</b>	4	<b>Credits</b>			4	<b>Total Hour s</b>
<b>CourseDetails</b>	<b>Learning Approac h</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>	
		3		1		
<b>Pre-requisites,ifany</b>						



	<b>Learning Approach</b>	3		2		75
<b>Pre-requisites, if any</b>						

#### **COURSE OUTCOMES (CO)**

<b>CO No.</b>	<b>Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i></b>	<b>Learning Domains *</b>	<b>PO No</b>
1	Describe the fundamental concepts of agricultural economics, elucidating their interconnectedness with the development of the agricultural sector	U	1, 3
2	Examine the historical context of agricultural development, considering how past practices and policies have shaped current agricultural practices	E	1
3	Analyse agricultural market dynamics and market trends, to make informed decisions related to crop selection, production, and sales	An	1, 6
4	Develop entrepreneurial skills in agribusiness management using local knowledge and sustainable practices in the agricultural sector.	An	1, 5
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

#### **COURSE CONTENT**

##### **Content for Classroom Transactions (Units)**

<b>Module</b>	<b>Units</b>	<b>Course description</b>	<b>Hrs</b>	<b>CO No.</b>
<b>1</b>	<b>Introduction to Agricultural Economics</b>		<b>15</b>	
	1.1	Agricultural Economics – meaning - definition- subject matter- cob-web model	3	1

	1.2	Contribution of agriculture in Economic Development. Instability, Risk and Uncertainty in Agriculture	3	1
	1.3	Farm management and Production economics - Meaning, definition, and scope - Optimal factor combination - application of the Law of technical substitution	4	1
	Practicum	Meet with a farmer to understand their current farming practices, crop type, and average yield and issues faced . Collect data on: Current costs of labor and fertilizer per unit, Historical crop yields associated with different input levels (if available),Market prices for the crops produced.	5	
<b>2</b>	<b>Agricultural Growth in India</b>		<b>19</b>	
	2.1	Agricultural growth in India since independence –cropping pattern- shifts --Green Revolution-second generation green revolution[discussions in perspective of Kerala’s agriculture)	5	2
	2.2	The agrarian question: from classic to current debates (Marx, Lenin, Dobb-Sweezy- Brenner Debate) (basic ideas only)	4	2
	2.3	Globalisation and the Indian agriculture	2	2
		Practicum : Research the concept of globalization and its impact on agricultural markets. Collect data on historical price trends for major/any of the agricultural commodities grown in India. Students can utilize data from government sources or agricultural market databases. Report the impact of globalisation	8	
<b>3</b>	<b>Agriculture Finance and Marketing</b>		<b>20</b>	

	3.1	Agricultural Marketing and its Importance- Marketing functions – Classifications of agriculture market- Marketable and Marketed Surplus;; Marketing Channels; Regulated Market; Private market-Marketing efficiency; Direct marketing, private markets, Organized Retailing [concepts only] – Problems of Agricultural marketing	6	3
	3.2	Farmer Producers Organizations (Agricultural cooperatives); Agricultural Value Chains Agricultural finance- sources: institutional and non-institutional- NABARD: role and functions. Crop insurance programmes in India	5	3
	3.3	Factors affecting demand for and supply of farm products -Market intermediaries and its regulation.	4	3
	Practicum	Analyze the role of NABARD in Supporting a Specific Agricultural Project in Kerala	5	
<b>4</b>	<b>Farm Management</b>		<b>21</b>	
	4.1	Farm management- Principles of farm management–Farm management decisions– principles of factor substitution	4	4
	4.2	Cost Principles – Opportunity Cost Principle – Principles of Comparative Advantage – Limitations of Farm Management.	4	4
	4.3	Measures of Farm Efficiency - Size of the Farm and Productivity	3	4
	4.4	Innovative practices in farming: Integrated farming, contract farming, organic farming, precision farming, [concepts only] aquaponics, hydroponics [conduct case studies]	4	4
	Practicum	Research and gain a solid understanding of each innovative farming practice such as Integrated farming, Contract farming, Organic farming, Precision farming Aquaponics, Hydroponics etc Evaluate the impact of the practice on factors like: Sustainability (environmental impact, soil health),Productivity (yield, resource efficiency),Profitability (economic viability for the farmers)Social impact (working conditions, community involvement)	6	

5	Teacher Specific Module		
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<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures, seminar presentations, practicum sessions and student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"> <li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li> <li>o CD2 – Group discussions</li> <li>o CD3 - Class Seminars</li> <li>o CD4 – Field visits</li> </ul>												
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table border="1"> <thead> <tr> <th>Particulars</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>Class Tests</td><td>15</td></tr> <tr> <td>Assignments</td><td>5</td></tr> <tr> <td>Seminar/Viva</td><td>5</td></tr> <tr> <td>Project/Practicum</td><td>5</td></tr> <tr> <td><b>Total</b></td><td><b>30</b></td></tr> </tbody> </table>	Particulars	Marks	Class Tests	15	Assignments	5	Seminar/Viva	5	Project/Practicum	5	<b>Total</b>	<b>30</b>
Particulars	Marks												
Class Tests	15												
Assignments	5												
Seminar/Viva	5												
Project/Practicum	5												
<b>Total</b>	<b>30</b>												

<b>B. Semester End examination</b> <b>Written Examination (MCQ 10 marks and Written Answers 60 marks)</b>			
<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
Short Answer	50 words	5 out of 8	5 x 2 = 10
Short Essay	150 words	4 out of 7	4 x 5 = 20
Essays	450 words	2 out of 4	2 x 15 = 30
MCQ	NA	10	10 x 1 = 10
<b>Total</b>			<b>70</b>

### References

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19. Akram-Lodhi, A. H., & Kay, C. (2010b). Surveying the agrarian question (part 2): Current debates and beyond. *Journal of Peasant Studies*, 37(2), 255-284.

### **Suggested Reading**

1. Soni, R. N., & Malhotra, Sangeeta. (2015). *Leading issues in agricultural economics* (12th ed.). Vishal Publishing Co.



<div>Est. in 1921</div> <div></div>		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>International Finance</b>					
<b>Type of Course</b>	<b>DSE</b>					
<b>Course Code</b>	UC4DSEECO205					
<b>Course Level</b>	<b>200-299</b>					
<b>Course Summary</b>	<p>The course provides a comprehensive overview of international finance, emphasizing its importance and its connections to global trade and business. It covers key topics such as the International Monetary System and reserve currencies, exploring their role in facilitating trade and investment. Discussions also include the IMF's function in maintaining global liquidity and the impact of private capital mobility. The course addresses exchange rate systems, balance of payments components, and the implications of currency convertibility, particularly in India. It examines the foreign exchange market, risk management strategies, and the relationship between inflation, interest rates, and exchange rates. Additionally, it discusses international capital movements, focusing on FDI, FPI, multinational corporations, and global financial institutions. Finally, it touches on new institutions, currency internationalization, and the role of international cooperations like the G20, BRICS, and the Financial Stability Board in shaping the global economic landscape.</p>					
<b>Semester</b>	<b>4</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>	Learning Approach	Lecture	Tutorial	Practical	Others	
		3	0	2		
<b>Pre-requisites, if any</b>						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Explain internationally agreed rules, conventions and supporting institutions that facilitate international trade.	U	9, 10
2	Analyse how financial institutions, currencies and policies impact economic stability.	AN	3,7
3	Identify various rules and institutions facilitating the trading of wealth and assets between countries.	A	6, 9
4	Assess liquidity and global investment opportunities that drives economic development.	E	1,2
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

#### Content for Classroom transaction (Units)

Module	Units	Course Description	Hours	CO No
1	<b>International Finance: Basic concepts and issues</b>		<b>19</b>	
	1.1	International Finance: Meaning, and significance-Relation between international trade, international business, and international finance.	3	1
	1.2	International Monetary System-Facilitatory role of international monetary system on trade and investment-Reserve Currencies.	3	1
	1.2	IMF and International Liquidity-Role of private capital mobility in smoothening international liquidity.	4	1
	1.3	Flexible Exchange rate system-currency movements (appreciation and depreciation)-Currency crisis.	3	1
	1.4	Balance of payment-Components -balance of payment problem -Currency convertibility-capital account	3	1
		convertibility-risks and opportunities of currency convertibility in the Indian context.		



	Practicum	Analyze Currency Movements and Impact on Exports: Research recent trends in exchange rates. Identify factors influencing these movements (e.g., global economic conditions, interest rates). Analyze the impact of currency appreciation or depreciation on the client's export competitiveness. How do exchange rate fluctuations affect their profitability.	3	
<b>2</b>	<b>Foreign exchange market and foreign exchange risk</b>		<b>18</b>	
	2.1	Foreign exchange market-Participants in the foreign exchange market (India)-Functions of the foreign exchange market.	3	2
	2.2	Foreign exchange risk-hedging, arbitrage, speculation- Currency derivatives: Currency futures, options market-major international financial centres.	6	2
	2.3	Connection between inflation, interest rates and exchange rates Purchasing power parity theory, international fisher effect.	3	2
	2.4	Country risk analysis: political risk factors, financial risk factors and economic risk factors.	3	2
	Practicum	Research the structure and regulations of the Indian Forex market. Identify the major participants in the Indian Forex market, including: Authorized Dealer (AD) Banks, Exporters and Importers, Reserve Bank of India (RBI), Foreign Institutional Investors (FIIs), FPI s Individuals (for travel, remittances) etc . Or Choose a recent news article or case study about an Indian company facing challenges due to currency fluctuations.	3	
<b>3</b>	<b>International capital movements</b>		<b>18</b>	
	3.1	International capital movements-FDI vs FPI-ECBs- Rupee denominated bonds.	5	3

	3.2	Risks of international capital volatility on developing economies like India-sudden stop hypothesis-short term capital vs long term capital.	6	3
	3.3	Multinational Corporations: role and operations in the global economy-role of Bilateral Investment Treaty.	4	3
	Practicum	Prepare a comprehensive report on the role of MNCs, the key provisions of BITs, and their potential impact on the chosen industry.	3	
<b>4</b>	<b>International Financial Institutions and Multilateral Agencies</b>		<b>20</b>	
	4.1	World Bank and the affiliates: role in development finance. Emergence of new institutions -AIIB and NDB.	5	4
	4.2	Internationalization of rupee-prospects and challenges-Globalisation of financial markets: IFSC in India (the GIFT City).	5	4
	4.3	Role of international cooperations in facilitating global economic order-the G20, BRICS, Financial Stability Board.	5	4
	Practicum	Select a real-world development project in a developing country that has been funded by either the World Bank Group (WBG), the Asian Infrastructure Investment Bank (AIIB), or the New Development Bank (NDB). Utilize resources from these institutions or news articles about their recent projects to gather information about their specific development goals and project selection criteria.	5	
<b>5</b>	<b>Teacher specific Module</b>			

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge
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	Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>• CD1 - Lecture by use of boards/LCD projectors/Projectors/ICT Methods etc.</li><li>• CD2 - Tutorials/Assignments</li><li>• CD3 - Class Seminars</li><li>• CD4 - Peer group Discussions</li></ul>																							
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**References:**

1. Avadhani, V. A. \*International Finance\*. Himalaya Publishing House.
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<div> <div> <div>Est. in 1921</div>  </div> <div> <b>UNION CHRISTIAN COLLEGE, ALUVA</b> </div> </div>				
<b>Programme</b>	<b>BA (Hons) Economics</b>			
<b>Course Name</b>	<b>Basics of Fintech Entrepreneurship</b>			
<b>Type of Course</b>	<b>DSC C</b>			
<b>Course Code</b>	<b>UC4DSCECO202</b>			
<b>Course Level</b>	<b>200-299</b>			
<b>Course Summary</b>	<p>This course provides an introductory exploration into the dynamic world of financial technology (fintech) and the entrepreneurial opportunities it presents. The course is designed to equip students with a foundational understanding of the fintech landscape, the innovative technologies driving change, and the essential skills required to navigate and succeed in this rapidly evolving field. At present, India is having the most vibrant FinTech landscape in the world and hence, the course is designed on the basis of India's rapidly transforming fintech industry. Understanding the trends, technological developments involved, and the regulatory requirements will help them to grasp basic ideas about fintech entrepreneurship.</p>			
<b>Semester</b>	4	Credits	4	Total Hours

Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		3		2		75
Pre-requisites, if any						

#### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, the learner will be able to:	Learning Domains *	PO No
1	understand the various aspects related to the fintech sector in India.	U	1, 2, 3
2	create an idea about the development of a fintech enterprise	C	1, 2, 3, 10
3	apply the knowledge acquired here for the development of a fintech startup.	Ap	6. 7. 9. 10
4	evaluate the prospects and challenges involved in fintech entrepreneurship.	E	5, 6, 10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>		<b>Overview of the Fintech Sector</b>	<b>15</b>	<b>1</b>
	<b>1.1</b>	Introduction to Financial Technologies or Fintechs: Definition, evolution, and importance-Traditional versus digital finance-India as an emerging power in fintech-Trends in Indian Fintech sector: payments, lending, insurance, etc.	3	1, 3
	1.2	Fintech supporting infrastructure in India: Digital Public Infrastructure (DPI) in India and its supportive effect on fintech industry-India Stack-ONDC-RBI Innovation Hub.	4	
	1.3	Technological base of fintech entrepreneurship: Use of various technologies including AI in different areas of financial services like client onboarding, loan disbursement, recovery and customer interfaces-Robo advisors in wealth management services-Platforms and practices that support fintech in India: Aadhar verification, KYC norms, Video KYC, Payment Infrastructure, CIBIL Score, CIBIL Microfinance score.	8	
	<b>Practicum</b>	1. Map out the various components of DPI in India and demonstrate how they helped and supported the birth and rapid proliferation of fintech for financial institutions and the fintech firms. 2. Illustrate the operational aspects of CIBIL score.	10	
<b>2</b>		<b>India's Financial Services Industry -a Fintech angle Overview</b>	<b>15</b>	1, 2, 3
	2.1	Overview of the Indian financial services industry-Banks and NBFCs-MFIs, Payment banks and Small Finance Banks- Peer-to-Peer (P2P) Lending Platforms-Loan apps-Account Aggregators and other Fintech entities.	7	
	2.2	Overview of the Fintech industry in India-Leading categories (payments, lending tech, insure tech, neo banks, fintech Saas etc.) - Banks adopting financial technologies- Fintech firms as financial sector disruptors.	4	

	2.3	Ideation of a fintech firm: Need for a user centric approach – Business model canvas and value proposition design- Revenue models: subscription, transaction fees etc- Technological tool kits for Fintech enterprise.	4	
	<b>Practicum</b>	1. Map the different types of fintech enterprises operating in India. 2. Explore and demonstrate the interdependence between banks, NBFCs and fintech firms in the Indian context. 3. Give ideation and provide a suitable business model for a potential fintech startup.	10	
<b>3</b>		<b>Electronic Money-Cryptocurrencies and Blockchain Technology</b>	<b>15</b>	<b>2, 3, 4</b>
	3.1	Electronic Money and Cryptocurrencies-CBDC-Types of cryptocurrencies/assets-Difficulties in regulating cryptocurrencies-Global attempts to regulate crypto assets.	7	
	3.2	Crypto currencies: Currency vs asset nature-Risks of cryptocurrencies-Crypto Exchanges-Crypto crisis in the recent past.	8	
	3.3	Blockchain technology-Applications of blockchain technology in the financial sector.	10	
	<b>Practicum</b>	Classify the different types of crypto assets. Compare and contrast crypto assets with CBDC. Analyse the failure of FTX and the message it left to the financial regulators.	5	
	<b>4</b>	<b>Regulatory landscape for fintech in India</b>	<b>15</b>	<b>1, 2, 3, 4</b>
	4.1	Regulatory Framework for Fintech industry: RBI Guidelines and Regulations-Fintech Repository.	4	
	4.2	Role of Self-Regulatory Organisations (SRO) in the fintech landscape-Financial stability and the fintech industry.	2	



	4.3	Evolution of India's digital payment ecosystem- Components of Digital payment ecosystem in India - Uniqueness of UPI-Internationalisation of UPI- Comparison of UPI with other major digital payments systems across the world.	6	
	<b>Practicum</b>	Discuss the need for drawing a balance between regulation and innovation support of fintechs. Elaborate the unique advantages of UPI as a rockstar in the global fintech arena.	5	
5	<b>Teacher specific Module</b>			

<b>Teaching and Learning Approach</b>	<p><b>Classroom Procedure (Mode of transaction)</b></p> <p><b>CD1-Lecture-Based Instruction:</b> Lecture classes on the various concepts and leading developments related with the FinTech sector.</p> <p><b>CD2 - Case Studies:</b> Case study related various fintech developments including the crypto crisis, development of fintech startups India etc.</p> <p><b>CD3-Group Discussions:</b> Disruption caused by fintechs to traditional banking and NBFC business.</p> <p><b>CD4 - Interactive Workshops:</b> Use of emerging technologies for the development of fintech business.</p> <p><b>CD5: Project discussion:</b> On the promotion of ideas, enterprise design and MVP for starting a fintech firm.</p>
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Assessment Types	MODE OF ASSESSMENT			
	A. Continuous Comprehensive Assessment (CCA) – 30 Marks			
	Particulars		Marks	
	Assignment		10	
	Group Discussion		10	
	Report writing and presentation		10	
	Total		30	

B. Semester End examination			
Written Examination (MCQ 10 marks and Written Answers 60 marks)			
Descriptive type	Word Limit	Number of questions to be answered	Marks
Short Answer	50 words	5 out of 8	5 x 2 = 10
Short Essay	150 words	4 out of 7	4 x 5 = 20
Essays	450 words	2 out of 4	2 x 15 = 30
MCQ	NA	10	10 x 1 = 10
Total			70

## **References**

1. The Fintech Entrepreneur's Guide, Ashok Mittal, 2022.
2. Fintech Future: The Digital DNA of Finance, Sanjay Phadke, Atlantic Publishers and Distributors (P) Ltd, 2023.
3. Digital Bank: Strategies To Launch Or Become A Digital Bank, Embassy Books, 2017.
4. Bitcoin and Cryptocurrency Technologies: 4 Books, Keizer Söze, Sabi Shepherd Ltd, 2019.
5. Financial Technology (FinTech) and Digital Banking in India, Jaspal Singh, New Century Publications 2022.
6. Private Equity Venture Capital in Financial and Fintech, October-December 2023, RBI Innovation Hub, RBI.PRIVATE EQUITY-VENTURE CAPITAL IN FINANCIAL SERVICES & FINTECH

## **Suggested Readings**

1. FinTech Revolution in India: Opportunities and Challenges, CA Dr. Brajesh Kumar Jaiswal, Notion Press, February, 2024.
2. RBI Innovation hub.<https://rbihub.in/>



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<b>Programme</b>	<b>BA (Hons) Economics</b>
<b>Course Name</b>	<b>Digital Economy Skills for Enterprise Development</b>
<b>Type of Course</b>	<b>Skill Enhancement Course (SEC)</b>
<b>Course Code</b>	<b>UC4SECECO200</b>
<b>Course Level</b>	<b>200-299</b>
<b>Course Summary</b>	<p>This course is designed to foster digital enterprise development and impart skills among students within the evolving landscape of digital economy. An innovative approach of blending the methodology of economics with the leading trends in the digital world is adopted in the context of the requirements of skill enhancement. The primary objective is to impart basic knowledge and enhancement of skills in digital tools, and platforms which are essential for initiating digital business enterprises. The syllabus adopts an interdisciplinary approach; keeping the core traits of Economics; aiming to provide students with a comprehensive understanding of digital entrepreneurship and guiding them to acquire the digital entrepreneurial skills in the framework of social science discipline. Regarding the overall approach, the content should be delivered focusing on applying the digital techniques from a user angle by integrating the core economic message. Core economic concepts should be integrated into the technological landscape. Teachers should use the basic concepts of microeconomics to interpret several of the digital developments and hence are to be explained in the context of the market mechanism angle wherever necessary. Various software tools mentioned in this course need not be purchased to provide the information; rather, a demonstration about their profile, features etc. with the help of the internet is sufficient. Use of computer lab facility is highly desirable for the course.</p>

Semester	4	Credits			3	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		3				
Pre-requisites, if any	Basic knowledge in microeconomics.					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, the learner will be able to:	Learning Domains *	PO No
1	understand the opportunities and platforms for digital entrepreneurship and the power of network economics.	U	1, 3
2	plan a structured approach in Digital Enterprise Development in the context of digital economic opportunities.	S, C	10, 9,3
3	apply and develop the skills in various methods and platforms for enterprise development in the domain of digital economy.	A, S	10, 3
4	compose an effective branding plan for Digital Enterprise Development.	S, C	9, 10, 3, 5
5	find and understand the avenues of emerging tools like AI to enhance digital enterprise activities.	U	3, 9
6	build the skill in various tools and methods in building digital enterprises.	S, A	5, 3, 10
7	build an awareness about the ethical and safety principles in the digital world.	S, C	6, 7, 8
<b><i>Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i></b>			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Platforming an enterprise in the digital economy.</b>		<b>15</b>	
	1.1	Scope and significance of digital economics and digital economy- key features of digital economy-Enterprise development in the digital economy era: opportunities and challenges.	3	1
	1.2	The rise of platform economy-various digital enterprise technologies -mobile-e-commerce, social media, Cloud, AI, automation and Blockchain.	3	1
	1.3	Network Economics-meaning, importance- Network economies of scale-Social networking, userbase development and branding using social media for business-Digital business transformation.	4	1
	1.4	Enterprise Development tools and platforms-Google Business Profile, Google Workspace, Google Analytics-Map API (concepts only)-Economic and business benefits of digital platforms.	5	6
	<p>Group Discussion: Importance of digital enterprise and the need to develop digital presence for a physical business unit.</p> <p>Group Discussion: The power of Network Economics and its application in the digital economy.</p>			
<b>2</b>	<b>Basic tools for digital economy management.</b>		<b>15</b>	
	2.1	Pricing of digital products-Enterprise development tools: Economics of cloud storage- Case study: Office 365.	5	4
	2.2	Economic benefits of digital platforms for work, marketing etc -Government E-MarketPlace (GEM)-Uses of Content Management Systems-LMS.	3	2, 3
	2.3	Websites for Enterprises-Domain Registration-Storage-Control Panels (concepts only) Apps and their significance in business.	3	2, 3

	2.4	Role of ecommerce payment gateways (concept only)- Online stores: steps for creation- India Stack-ONDC.	4	2, 3,6
	Group Discussion: Importance of secure and stable ecommerce avenues in digital business. Mini Project: Map out the basic components of a web portal.			
<b>3</b>	<b>Branding and security in the digital economy and Economics of AI and Robotics</b>		<b>15</b>	
	3.1	Economic benefits of digital branding-Digital branding and advertising using social media-Major social media platforms: Meta, LinkedIn, YouTube, Google ad sense-ads manager/ad settings.	5	1,6
	3.2	Role of technological progress in productivity expansion-A survey of productivity enhancing digital tools- AI and IoT devices in enterprise management-Economic implications of large language models and neural networks-Different AI applications in industry, services (including education) and agriculture-AI: task facilitator vs job replacer.	5	1
	3.3	Business risks in the digital world: Digital Security-Digital Privacy-Data Security -User Authentication and Authorisation-IPR and Digital Rights-Ethical, Safety, Security, and other principles-Social Engineering Attacks-Government Regulations in India regarding Digital Security.	5	7
		Discussion: Digital security issues in the Digital Economy.		
<b>4</b>	<b>Teacher Specific Module</b>			

<p><b>Teaching and Learning Approach</b></p>	<p><b>Suggested Classroom Procedure (Mode of transaction)</b></p> <p>CD 1- Demonstration: Demonstration of the digital tools using mobile phones or laptops can be used as a prime mode to introduce the digital platforms and trends (tools as well) covered under this course. Examples are the creation of business profile, social media ad management campaign etc. Demonstration of the design elements of LMS, various features of Office 365, Cloud, Google Map API etc, should be done while going through the relevant topics.</p> <p>CD2: Lecture-Based Instruction: Lectures on most digital concepts and their scope and application for digital enterprise development.</p> <p>CD 3: Skill Generation Exercises: Being an SEC, skill generation efforts can be a major mode of delivery of the content for this course. Skills like starting of ecommerce seller license, prerequisites needed for starting a website (without the development part) etc. can be provided to the students.</p> <p>CD4: Use of digital content for skill generation: Instruct the students to prepare a list of YouTube videos that helps them to develop the various digital skills like managing the Office 365, Google Workspace, Google Business Profile etc.</p> <p>CD 5: Self learning: Instructing students to visit websites like GEM, Google Map API, DigiLocker, Digital Marketing etc. to prepare a report on their working and create a brief note on how they may help them to develop/run their own business enterprise.</p> <p>CD 6 - Group Discussions: Conduct group discussions to explore the different opportunities of AI in facilitating productivity and digital business entrepreneurship.</p>	
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	<p>CD 7 - Interactive Workshops: Conduct interactive workshops on methods for digital branding.</p> <p>CD 8 -Chart Making: Prepare charts elaborating the various digital security threats.</p> <p>CD 9-Computer Lab Sessions: Engage students in the computer lab for familiarising the various digital skills instructed in this course.</p> <p>CD 10: Mock Exercises: Conduct an online ad campaign using any of the stipulated digital ad platforms (upto ad settings using the ad manager is enough).</p> <p>CD 11: Assignments: Information from digital sources in the form of text, images, videos and links can be consolidated and presented on selected topics like the use of various digital tools, running of digital advertisements etc (this should be kept in digital format using images, links, textual contents, videos if needed) and this should be regarded as assignments.</p> <p>CD 12: Case Study Analysis: Understand real-world case studies to illustrate the application of exploratory, descriptive, diagnostic, evaluation, action research, experimental, analytical, historical, survey, and field study methods.</p>	
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Assessment Types	MODE OF ASSESSMENT															
	A. Continuous Comprehensive Assessment (CCA)															
	(1) Formative Assessment (FA)															
	<table><tr><th>Assessment type</th><th>Number</th><th>Marks for one assessment</th><th>Total Marks</th></tr><tr><td>Report writing and presentation after making an industry visit</td><td>1</td><td>10</td><td>15</td></tr><tr><td>Lab/digital exercises</td><td>1</td><td>5</td><td>10</td></tr></table>				Assessment type	Number	Marks for one assessment	Total Marks	Report writing and presentation after making an industry visit	1	10	15	Lab/digital exercises	1	5	10
	Assessment type	Number	Marks for one assessment	Total Marks												
Report writing and presentation after making an industry visit	1	10	15													
Lab/digital exercises	1	5	10													
(2) Summative Assessment (SA)																

	<b>Assessment type</b>	<b>Number</b>	<b>Marks for one assessment</b>	<b>Total Marks</b>
	Mini Project	1	10	10
	<b>Total Marks for CCA (1+2)</b>			<b>25</b>
<b>B. Semester End Examination-Written Examination.</b>				
	<b>Question type</b>	<b>Word limit</b>	<b>Choice</b>	<b>Total Marks</b>
	Short Answers	50 words	10 out of 15	10 x 1 = 10
	Short Essays	150 words	10 out of 15	10 x 4 = 40
	<b>Total Marks</b>			<b>50</b>

### **References**

1. Principles of Digital Economics: Innovation Theory in the Age of Intelligence, Zhiyi Liu, Springer, 2022.
2. The Digital Economy (Anniversary Edition): Rethinking Promise and Peril in the Age of Networked Intelligence, Don Tapscott, McGraw-Hill Education; 2nd edition, 2014.
3. The Economics of Digital Transformation, Katarzyna Śledziewska and Renata Włoch, first published 2021, Routledge.
4. Digital Economy (practical Guide): Economic Development and Digital transformation, Gilbert Saldivar, Lew Temple, FRESHMAN, Kindle Edition, 2021.
5. The Cosmo-Creative Society: Logistical Networks in a Dynamic Economy- (Advances in Spatial and Network Economics), Ake E. Andersson E Ake, Batten F David, Kobayashi Kiyoshi, Springer, 2012.
6. The Oxford Handbook of the Economics of Networks, Yann Bramoull, Andrea Galeotti, et al., Oxford Handbooks, 2016.
7. Digital Transformation: Build Your Organization's Future for the Innovation Age, Herbert Lindsay, Bloomsbury Business India, 2017.
8. Working with Microsoft Office 365 – Running Your Small Business in the Cloud, Hill Brett, Microsoft Press US, 2012.
9. Platform Pioneers 2024: Social Media Marketing Mastery Guide, Future-Proof Strategies for Brand Brilliance, YouTube, Google Ads, Meta, Blogging and More (Kindle Edition), Knight Ryan, ASIN: B0CJ71K712.
10. Digital and Social Media Marketing: A Results-Driven Approach, Routledge; 2nd edition, Heinze Aleksej, 2020.
11. The Economics of Artificial Intelligence, Ajay Agrawal Ajay, Gans Joshua and


Avi Goldfarb, Oxford University Press, 2019.

12. Artificial Intelligence: The Insights You Need from Harvard Business Review, Thomas H. Davenport, Erik Brynjolfsson, Andrew McAfee, H. James Wilson, Harvard Business Review, 2019.
13. The Age of the Platform: How Amazon, Apple, Facebook, and Google Have Redefined Business, Simon Phil, Simon Hris Consulting, 2011.
14. Digital Economics, Avi Goldfarb and Catherine Tucker, NBER, 2017.
15. Personalised Pricing in the Digital Era, Organisation for Economic Co-operation and Development, Directorate for Financial and Enterprise Affairs Competition Committee, 2018.

### **Suggested Readings**

1. Booming Digital Stars: 11 Inspiring Journeys from India's Creator Economy, Harsh Pamnani and Manish Pandey, 2021, Pencil Select.
2. Cyber Security, Artificial Intelligence, Data Protection and the Law, Rober Walters, Marko Novak, Springer, 2021.
3. Winning in The Digital Age, Penguin Enterprise, Seth Nithin, 2021.



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<b>Programme</b>	<b>BA (Hons) Economics</b>				
<b>Course Name</b>	<b>Sustainable Development Strategies and Governance</b>				
<b>Type of Course</b>	<b>VAC</b>				
<b>Course Code</b>	<b>UC4VACECO200</b>				
<b>Course Level</b>	<b>200-299</b>				
<b>Course Summary</b>	<p>This undergraduate course empowers the learner, to navigate towards a more sustainable future. Explore the interconnectedness of social, economic, and environmental issues through the lens of the UN's Sustainable Development Goals (SDGs). Engage in critical discussions about governance frameworks, and stakeholder participation in driving positive change. Develop analytical, problem-solving, and communication skills to contribute effectively to a just and sustainable world. This course is for degree students across disciplines, equipping learners with the knowledge and tools to become an agent of sustainable development.</p>				
<b>Semester</b>	4	<b>Credits</b>			3
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical</b>	<b>Others</b>
		3			
<b>Pre-requisites, if any</b>					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, students will be able to;	Learning Domains *	PO No
CO1	comprehend the concepts and debates on sustainable development.	U	1,6,7,8,9, 10
CO2	evaluate the MDGs and SDGs in general	E	1,2,4,6,7,8,9,10
CO3	analyze the interlinkages between ecosystem and sustainability concepts.	An	1,2,3, 6,7,8,9,10
CO4	understand the analytical framework for sustainability studies	U	1,2,3,4, 6,7,8,9,10
CO5	examine the community-based approaches and resilience techniques	An	1,2,3, 6,7,8,9,10
CO6	assess principles of effective governance for sustainable development	E	1,2,3, 6,7,8,9,10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transactions (Units)

Module	Units	Course description	Hrs	CO No.
1		<b>Introduction to Sustainable Development</b>	<b>15</b>	
	1.1	Broad Introduction to Sustainable Development: Context – importance – impact – implications – definition of Sustainable Development.	3	1
	1.2	Sustainable Development Debates: UN Conference on the Human Environment (1972) - World Commission on Environment and Development (1987) - United Nations Conference on Environment and Development (1992) -General Assembly Special Session on the Environment (1997) - World Summit on Sustainable Development (2002) - UN Conference on Sustainable Development (2012) - UN Sustainable Development Summit (2015) - UN Framework	9	1

		Convention on Climate Change: 21st Conference of Parties (COP21) (2015) - Global Warming of 1.5 °C: IPCC Special Report (2018) - UN Climate Action Summit (2019) - IPCC Reports for Assessment Report-6 (refer <a href="https://research.un.org/en/docs/environment/conferences">https://research.un.org/en/docs/environment/conferences</a> )		
	1.3	Sustainable Development Perspectives: MDGs and SDGs – Evaluation of MDGs and SDGs over the years.	3	2
2	<b>Ecosystem &amp; Sustainability</b>		<b>15</b>	
	2.1	Fundamentals of ecology - types of ecosystems & and interrelationships, factors influencing sustainability of ecosystems, ecosystem restoration - developmental needs.	3	3
	2.2	Introduction to sustainability and its factors, requirements for sustainability: food security and agriculture, renewable resources - water and energy, non-renewable resources, factors and trade-offs, sustainability conflicts, a conceptual framework for linking sustainability and sustainable development.	6	4
	2.3	Overview on Analytical Framework for Sustainability Studies [Pressure-State-Response (PSR) Framework - DPSIR Framework (Drivers-Pressure-State-Impact-Response)- Sustainability Assessment Framework - Resilience Framework - Planetary Boundaries Framework - Ecological Footprint Analysis - Social-Ecological Systems (SES) Framework (Overview only)]	3	4
3	<b>Community Resilience and Governance</b>		<b>15</b>	
	3.1	Community resilience - definition – resilience: types-causes; Social Equity and Justice in Community Resilience – Food security – shelter – health care.	5	5
	3.2	Community-Based Approaches to Disaster Preparedness and Response – Basic terms: <u>Crisis</u> , <u>Emergency</u> , <u>Hazards</u> , <u>Disaster</u> , and <u>Catastrophe</u> - environmental policy instruments: “command and control” instruments-market-based instruments-	5	5
		informational/educational instruments, and voluntary agreements (Overview only)		

	3.3	Principles of Effective Governance for Sustainable Development – Effectiveness (Competence, Sound policy-making, collaboration); Accountability (Integrity, Transparency, Independent oversight); Inclusiveness (Leaving no one behind, no discrimination, participation, subsidiarity, intergenerational equity) - Legal Frameworks for Environmental Protection: General, Water, Air, Wildlife and Forest (Indian Context)	5	6
<b>Practicum</b>	Case Studies & Projects on Rural Sustainable Development (Indian perspectives) (internal evaluation only)			1,2,3,4,5,6
<b>4</b>	<b>Teacher Specific Module</b>			

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide a solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>• CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>• CD2 - Tutorials/Assignments</li><li>• CD3 - Class Seminars</li><li>• CD4 - Peer group Discussions</li></ul>			
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 25 Mark</b>			
	<b>Particulars</b>			<b>Marks</b>
	Module Test – I			5
	Module Test – II			5
	Module Test – III			5
	Seminar / Assignment			5
	Project/Practicum/Quiz/Book Review/Fieldwork etc.			5
	<b>Total</b>			<b>25</b>
	<b>B. Semester End examination</b> <b>Written Examination for 50 marks.</b>			
	<b>Descriptive Type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	50 words	4 out of 6	4 x 3 = 12
	Short Essay	150 words	3 out of 6	3x 6 = 18

	Essays	300 words	2 out of 4	2 x 10 = 20
	<b>Total</b>			<b>50</b>

### References and Suggested Readings

1. Rockström, J., et al. "Planetary Boundaries: Exploring the Safe Operating Space for Humanity." *Ecology and Society*, vol. 14, no. 2, 2009.
2. Wackernagel, M., and Rees, W. "Our Ecological Footprint: Reducing Human Impact on the Earth." New Society Publishers, 1996.
3. United Nations. *Transforming our World: The 2030 Agenda for Sustainable Development*. United Nations, 2015.
4. Walker, B., and Salt, D. *Resilience Practice: Building Capacity to Absorb Disturbance and Maintain Function*. Island Press, 2012.
5. Ostrom, E. "A General Framework for Analyzing Sustainability of Social-Ecological Systems." *Science*, vol. 325, no. 5939, 2009, pp. 419-422.
6. Cutter, S. L., et al. "Social Vulnerability to Environmental Hazards." *Social Science Quarterly*, vol. 84, no. 2, 2008, pp. 242-261.
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11. *Millennium Ecosystem Assessment. Ecosystems and Human Well-being: Synthesis*. Island Press, 2005.
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13. Dietz, T., Elinor Ostrom, and Paul C. Stern. "The Struggle to Govern the Commons." *Science* 302.5652 (2003): 1907-1912.
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15. Ellen MacArthur Foundation. *Towards the Circular Economy: Economic and Business Rationale for an Accelerated Transition*. 2012.
16. Jackson, Tim. *Prosperity Without Growth: Economics for a Finite Planet*. Earthscan, 2009.




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18. Soubbotina, Tatyana P. *Our Common Journey: A Transition Toward Sustainability*. National Academy Press, 2004.
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22. Soubbotina, Tatyana P. *Beyond Economic Growth: An Introduction to Sustainable Development*. WBI learning resources series. World Bank, 2004.
23. Kerr, Julie. *Introduction to Energy and Climate: Developing a Sustainable Environment*. CRC Press, 2017.
24. Saito, Osamu. *Sharing Ecosystem Services*. Springer Singapore, 2020.
25. Nhamo, Godwell, and Vuyo Mjimba. *Sustainable Development Goals and Institutions of Higher Education*. Springer, 2020.
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Internship (Summer)		
Course Code	Type	Credit
UC4INTECO200	INT	2



# SEMESTER - 5



<div>Est. in 1921</div> <div></div>		<div>UNION CHRISTIAN COLLEGE, ALUVA</div>				
Programme	BA (Hons) Economics					
Course Name	Econometrics - I					
Type of Course	DSC					
Course Code	UC5DSCECO300					
Course Level	300 - 399					
Course Summary	The students will be acquainted with basic methodology, simple and multiple regression, test of hypothesis, model diagnosis and application.					
Semester	5	Credits			4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practicum	Others	
		4				
Pre-requisites, if any	Quantitative Economics – I & II					

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>An Introduction to Econometrics</b>		<b>16</b>	
	1.1	Nature, Evolution, Definition, Scope and Goals -Basic Concepts	3	1
	1.2	Types of Data: Time series-Cross-section –Pooled, Panel, Engineering data	4	2
	1.3	Steps in Econometric Methodology -Error Term and its significance-Dummy variable (Concept Only)	4	2
	Practicum	Identify various data sets and gain practical experience working with various data structures commonly used in data analysis. This will help to develop skills in data acquisition, and analysis techniques appropriate for each data type. And also understand the strengths and limitations of different data structures for addressing specific research questions.	5	
<b>2</b>	<b>Module -II –Linear Models</b>		<b>25</b>	
	2.1	Simple Regression - PRF-SRF— Theory of estimation (Ordinary Least Squares only) Sampling distribution-Point vs. Interval Estimation-Standard Error -Multiple regression analysis (Basics only)	8	4
	2.2	Assumptions of CLRM	3	4
	2.3	Gauss Markov Theorem and BLUE	3	4
	2.4	Goodness of fit -Coefficient of determination- Multiple $R^2$ - Adjusted $R^2$ —ANOVA table (Concept only)	6	3
	Practicum	Familiarize with ,SRF,PRF and Regression equations	5	3

<b>3</b>	<b>Model Diagnosis</b>		<b>21</b>	
	3.1	Test of hypothesis–Critical Region -Type I and Type II Errors-Level of Significance -Power of a test -Z and T (Concept Only).	8	4
	3.2	Concepts, Causes and Consequences of <u>Heteroscedasticity</u> , <u>Multicollinearity</u> and Autocorrelation ( No tests )	5	2
	3.3	Violation of Normality Assumption (Concept Only)	2	3
	Practicum	Solve sample problems to understand testing of hypothesis	6	
<b>4</b>	<b>Multiple Regression Analysis and Preparation of Term paper</b>		<b>13</b>	
	4.1	Multiple Regression Analysis (Basics)	4	2
	4.2	Assumptions	3	3
	4.3	Model	1	3
	Practicum	Preparation of term paper -Defining the problem ,Use the econometric methodology Analysis –Necessary Tests	5	3

## 5 Teacher Specific Module

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"> <li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li> <li>o CD2 - Tutorials/Assignments</li> <li>o CD3 - Class Seminars</li> <li>o CD4 - Peer group Discussions</li> </ul>
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**Assessments  
Type**

### MODE OF ASSESSMENT

#### A. Continuous Comprehensive Assessment (CCA) – 30 Marks

Particulars	Marks
Class Test	10



	Assignment		5	
	Term paper/ Practicum		15	
	Total		30	
	B. Semester End examination			
	Written Examination (MCQ 10 marks and Written Answers 60 marks)			
	Descriptive type	Word limit	Number of questions to be answered	Marks
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	4 out of 7	4 x 5 = 20
	Essays	450 words	2 out of 4	2 x 15 = 30
	MCQ	NA	10	10 x 1 = 10
	Total			70

### Reference

1. Gujarati, D. N., *Basic Econometrics*, McGraw-Hill Education, 2009
2. Greene, W. H., *Econometric Analysis*, Pearson, 2018
3. Wooldridge, J. M., *Introductory Econometrics: A Modern Approach*, Cengage Learning., 2019
4. Dougherty, C., *Introduction to Econometrics*, Oxford University Press, 2016
5. Gujarati, D. N., & Porter, D. C., *Econometrics by Example*, Palgrave Macmillan, 2009



### Suggested Readings

1. Stock, J. H., & Watson, M. W., *Introduction to Econometrics*, Pearson, 2015
2. Cameron, A. C., & Trivedi, P. K., *Regression Analysis of Count Data*, Cambridge University Press, 2013
3. Gujarati, D. N., & Porter, D. C., *Essentials of Econometrics*, McGraw-Hill Education, 2018
4. Heiss, F., *Using R for Introductory Econometrics*, Create Space Independent Publishing Platform, 2020
5. Johnston, J., *Econometric Methods*. John Wiley New York, 1985
6. Kennedy, P., *A Guide to Econometrics*, Wiley-Blackwell, 2008
7. Pesaran, M. H., *Time Series and Panel Data Econometrics*, Oxford University Press, 2015



<div>Est. in 1921</div> <div></div>		<div>UNION CHRISTIAN COLLEGE, ALUVA</div>				
Programme	BA (Hons) Economics					
Course Name	International Economics					
Type of Course	DSC					
Course Code	UC5DSCECO301					
Course Level	300-399					
Course Summary	<div><div>Est. in 1921</div><div></div></div> <p>This course provides a thorough exploration of essential concepts and theories crucial for understanding global trade dynamics. It covers International Economics fundamentals, advanced concepts like Opportunity Cost curves and Mercantilism, and analyzes Balance of Payments and Exchange Rate theories. Additionally, it delves into Trade Mechanisms, International Economic Institutions, and current trade challenges. Practical components include discussions on recent trends, field visits, and case studies. s. Overall, students gain a robust understanding of international trade, preparing them for careers in global trade and economics.</p>					
Semester	5	Credits			4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		3	0	2	0	75
Pre-requisites, if any	Basic knowledge on Microeconomic tools.					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Understand the basic theories and various tools in International Economics	U	1,2
2	Develop knowledge regarding BOP, its disequilibrium and the significance of various adjustment mechanisms in the present world.	A	2,4
3	Examine and draw inferences on India's Exchange rate fluctuations in recent years.	An	1, 3
4	Evaluate critically the significance of trade policies and the role of various economic integrations in the international trade.	E	1, 2,3,9
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>		<b>Introduction to International Trade Theories</b>	<b>20</b>	
	1.1	International Economics: Nature and scope-Basis of Trade-Trade as an Engine of growth.	2	<b>1</b>
	1.2	Opportunity Cost curve, Offer Curves (concepts only)- Terms of Trade: types	3	<b>1</b>
	1.3	Key approaches and theories: Mercantilism, Absolute Advantage and Comparative Advantage Models, Heckscher - Ohlin theory, Factor Price Equalisation theorem, Leontief's paradox- Gains from Trade.	10	<b>1</b>
<b>Practicum</b>		Identify major import and export items of Indian trade basket. (Internal)	5	
<b>2</b>		<b>Balance of Payments</b>	<b>20</b>	
	2.1	BOP - Meaning and structure – current account and capital account – equilibrium and disequilibrium	8	<b>2</b>

	2.2	Measures to correct Balance of Payment disequilibrium: Monetary and Non-Monetary Measures - Elasticity Approach- Marshall- Learner condition.	7	<b>2</b>
<b>Practicum</b>		Discussion on the recent trends in India's BOP. ( <b>Internal</b> )	5	
<b>3</b>		<b>Exchange Rate and Foreign Exchange Market</b>	<b>15</b>	
	3.1	Theories of exchange rate determination: Mint Parity Theory, Purchasing Power Parity theory, balance of payment theory- Fixed and Flexible exchange rate systems - Exchange rate system in India	7	<b>3</b>
	3.2	Foreign exchange markets: Functions, Participants- Determination of equilibrium exchange rate	3	<b>3</b>
	3.3	Types of foreign exchange transactions: spot and forward rates, hedging, speculation, arbitrage, futures, options and currency swaps (concepts only).	4	<b>3</b>
Practicum		Discussion on foreign exchange markets and imbibe the real life experience on trading and non- trading roles	1	
<b>4</b>		<b>Trade Mechanisms and International Economic Institutions.</b>	20	
	4.1	Commercial Policy – Free trade and Protection- Tariff, Quota and their effects, non-tariff barriers	4	<b>4</b>
	4.2	Economic Integration: Meaning, types and benefits- Prominent Trade Blocs: European Union, RCEP and ASEAN (overview only)- International Institutions: IMF, World Bank and WTO (Objectives and functions).	6	<b>4</b>
	4.3	Current Trade Problems and Challenges – Deglobalisation- De-dollarisation - Decoupling - Trade Wars- Migration and its economic impact - Global value chains.	5	<b>4</b>

<b>Practicum</b>	<b>(Internal)</b> <ul style="list-style-type: none"> <li>• Field visit to any Export oriented sectors</li> <li>• Case Study -</li> </ul> 1. Current Exim Policy of India. 2. Economic Integration among developing and developed countries (EU & ASEAN)	5	4
<b>5</b>	<b>Teacher specific Module</b>		

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b>  <b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"> <li>• CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li> <li>• CD2 - Tutorials/Assignments</li> <li>• CD3 - Class Seminars</li> <li>• CD4 - Peer group Discussions</li> </ul>																
<b>Assessment Types</b>	<table border="1"> <thead> <tr> <th colspan="2"><b>MODE OF ASSESSMENT</b></th> </tr> <tr> <th colspan="2"><b>Continuous Comprehensive Assessment (CCA) – 30 Marks</b></th> </tr> <tr> <th><b>Particulars</b></th><th><b>Marks</b></th></tr> </thead> <tbody> <tr> <td>Class Tests</td><td>15</td></tr> <tr> <td>Assignments</td><td>5</td></tr> <tr> <td>Seminar/Viva</td><td>5</td></tr> <tr> <td>Project/Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr> <tr> <td><b>Total</b></td><td><b>30</b></td></tr> </tbody> </table>	<b>MODE OF ASSESSMENT</b>		<b>Continuous Comprehensive Assessment (CCA) – 30 Marks</b>		<b>Particulars</b>	<b>Marks</b>	Class Tests	15	Assignments	5	Seminar/Viva	5	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	<b>Total</b>	<b>30</b>
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	<b>B. Semester End examination</b> Written Examination (MCQ 10 marks and Written Answers 60 marks)																

	<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
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	Short Answer	50 words	5 out of 8	$5 \times 2 = 10$
	Short Essay	150 words	4 out of 7	$4 \times 5 = 20$
	Essays	450 words	2 out of 4	$2 \times 15 = 30$
	MCQ	NA	10	$10 \times 1 = 10$
	<b>Total</b>			<b>70</b>


### References:

1. Cherunilam, F. International Economics. McGraw Hill, Education.
2. Economic and Social Commission for Asia and the Pacific. "Quantitative Assessment of the Economic Impact of Trade Wars and Make in India Program." Retrieved from <https://www.unescap.org/kp/2020/quantitative-assessment-economic-impact-trade-wars-and-make-india-program>, 2020.
3. European Central Bank. "Title of the Article." Retrieved from [https://www.ecb.europa.eu/pub/economic-bulletin/focus/2022/html/ecb.ebbox202108\\_01~e8ceebe51f.en.html](https://www.ecb.europa.eu/pub/economic-bulletin/focus/2022/html/ecb.ebbox202108_01~e8ceebe51f.en.html).
4. Huleppa, T. "The status of de-dollarization in the Indian economy." Retrieved from <https://www.jetir.org/papers/JETIR2301545.pdf>, 2023.
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6. Jarrel, L. The Dedollarization Paradigm: Rethinking Global Financial Systems. Kindle Edition.
7. Kindle, B. C. P. International Trade. R.D Irwin, Homewood.
8. Krugman, Paul, and Maurice Obstfeld. International Economics: Theory and Policy. Recent ed., Pearson Education Delhi.
9. Magableh, G. M. "Supply Chains and the COVID-19 Pandemic: A Comprehensive Framework." European Management Review, vol. 18, no. 3, 2021, pp. 363–382. DOI: 10.1111/emre.12449.
10. National Council of Applied Economic Research (NCAER). "The US-China Trade War: Impact on India and Its Policy Choices." NCAER Paper for the High-Level Advisory Group on Trade Policy, Ministry of Commerce, India, 2019, March 5.
11. Rana, K. C., and K. N. Varma. Internal Economics. Visual Publishing.
12. Rajkumar. Internal Economics. Excel Books, New Delhi.
13. Ratha, D., Mohapatra, S., & Scheja, E. "Impact of Migration on Economic and Social Development: A Review of Evidence and Emerging Issues." Policy Research Working Paper No. 5558.

14. Salvatore, D. International Economics: Trade and Finance. Recent ed., John Wiley and Sons, Limited.
15. Salvatore, D. Schaum's Outlines, Theory and Problems of International Economics. Tata MacGraw Hill, Delhi.
16. Sodersten, Bo, and Geoffrey Reed. International Economics. 3rd ed., McMillan Press Ltd.– International Economics, 2005.
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<https://documents.worldbank.org/curated/en/617151468332982240/pdf/WPS5558.pdf>.
18. DOI: 10.1596/978-1-4648-1281-1\_ch2





<div>Est. in 1921</div> <div></div>		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Data Analysis for Economics using Python</b>					
<b>Type of Course</b>	<b>DSE</b>					
<b>Course Code</b>	<b>UC5DSEECO300</b>					
<b>Course Level</b>	<b>300-399</b>					
<b>Course Summary</b>	This course is designed to provide students with fundamental data analysis skills in the field economic. Covering statistical methods and quantitative tools, it emphasizes hands-on applications such as data exploration, visualization, and interpretation. Students will learn to model economic trends, make predictions, and extract meaningful insights from datasets. The course equips them to contribute effectively to economic decision-making, market research, and policy formulation in an increasingly data-centric environment.					
<b>Semester</b>	<b>5</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	<b>Others</b>	
		<b>4</b>				
<b>Pre-requisites, if any</b>	Attempting Economic Analytics -I is a prerequisite for this course. at least 50% of the classes should be engaged with the support of computer lab. A five day workshop is to be arranged for the teachers before launching the course.					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	understand some fundamental programming tools that can be used for economic data analysis.	U	1, 2, 3
2	analyse economic data using the techniques learnt in this course	An	2, 3, 9.10
3	evaluate the specific problem and apply relevant tools for the particular dataset	E	2, 3, 9.10
4	create simple analytical models making use of Python	C	2, 3, 9.10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Introduction to programming for economic analysis</b>		<b>10</b>	
	1.1	Economics and Programming: Importance of programming in Economics- Introduction to Excel, SAS, SPSS, EViews, Gretl, Stata, R and Python Software.	3	1
	1.2	Introduction to Python : Setting Up the Python-installing Python- Uses of Integrated Development Environments- IDLE, Jupyter, PyCharm , Spyder, Visual Studio Code and Atom.	2	2
	1.3	Economic variables in Python Syntax: Variable types, lists, tuples, sets, dictionaries.	2	3
	1.4	Basic computation and Structuring Objects: lists , tuple, sets, strings and dictionary methods.	3	3
<b>Practical:</b>	1. Setting up of the python environment. 2. Using Python for basic economic computation		8	
<b>2</b>	<b>Python syntax and objects</b>		<b>11</b>	

	2.1	Control Flow statements in Python: Conditional Statements- IF , ELIF and ELSE , Iteration statements-for and while, Break statements.	3	3
	2.2	Python functions in Economics : Importance, Inbuilt functions-user defined functions- function rules.	3	3, 4
	2.3	OOP in Python: Creating python objects-methods-building classes.	3	3, 4
	2.4	Introduction to Libraries: <i>NumPy, Pandas, Scipy, Scikit leran, statsmodels</i> -Methods for importing modules.	2	3, 4
<b>Practical:</b>	1. Using Control flow statements in economic scenarios. 2. Creating Economic functions in python.		7	
<b>3</b>	<b>Quantitative Economics in Python</b>		<b>12</b>	
	3.1	Quantitative Economics using Python I: Linear Algebra-vectors-matrices-Linear equations-Eigen vectors ad Eigen value.	3	3
	3.2	Economic Data visualisation in Python: Introduction to visualisation libraries- matplotlib- Bar graph, Line graph , Scatter plot, pie chart.	3	4
	3.3	Quantitative Economics using Python II: Introduction to Probability-mean-variance- Data distributions-use of random module.	3	
	3.4	Drawing Economic graphs using Python-Demand and Supply Curves-Costs Curves-other curves.	3	3, 4
<b>Practical:</b>	1. Visualising Economic concepts using python		5	
<b>4</b>	<b>Data Handling</b>		<b>12</b>	
	4.1	Data and Python: Data extraction - Different Data file formats- CSV, Doc , text and PDF file extraction.	3	3, 4
	4.2	Data Handling in Python: Data cleaning approaches - qualitative and quantitative-Introduction to Database management systems.	3	3, 4
	4.3	Working with Pandas <i>DataFrame</i> : Exploring Data- count, binning, minimum, maximum, mean, variance and sd-Inclusion and Exclusion of Columns.	3	3, 4

	4.4	Modelling in Python- Libraries for Regression – Implementing Economic Models-Growth Models.	3	3, 4										
Practicum	1. Handling of missing data and outliers. 2. Regression Analysis using Python.		10											
5	Teacher Specific Module													
Teaching and Learning Approach	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide the basics of data analysis. Practical session should be conducted for familiarising the various data analytic techniques.													
	<b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>• CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>• CD2 - Tutorials/Assignments</li><li>• CD3 - Peer teaching</li><li>• CD4 – Lab sessions</li></ul>													
Assessment Types	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table border="1"><thead><tr><th>Particulars</th><th>Marks</th></tr></thead><tbody><tr><td>Lab based exercises</td><td>20</td></tr><tr><td>Class tests</td><td>05</td></tr><tr><td>Assignments</td><td>05</td></tr><tr><td><b>Total</b></td><td><b>30</b></td></tr></tbody></table>				Particulars	Marks	Lab based exercises	20	Class tests	05	Assignments	05	<b>Total</b>	<b>30</b>
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Type		Number of questions to be answered	Marks											

	MCQ	40	40 out of 50	$40 \times 1 = 40$
	Short Answer	50 words	15 out of 20	$15 \times 2 = 30$



	<b>Total</b>	<b>70</b>
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## Reference

1. Python for Data Analysis: Data Wrangling with pandas, NumPy, and Jupyter, Third Edition (Grayscale Indian Edition), Wes McKinney, Shroff/O'Reilly, 2022.
2. Fluent Python: Clear, Concise, and Effective Programming, Second Edition (Grayscale Indian Edition) Paperback, Luciano Ramalho, Shroff/O'Reilly 2022.
3. Learn Python Quickly: A Complete Beginner's Guide to Learning Python, Even If You're New to Programming, Code Quicky, 2020.
4. Python for Everybody: Exploring Data in Python 3, Charles Severance, Shroff Publishers
5. Data Analysis with Python: Introducing NumPy, Pandas, Matplotlib, and Essential Elements of Python Programming, Rituraj Dixit, 2022.
6. Python Data Analysis: Perform data collection, data processing, wrangling, visualization, and model building using Python, 3rd Edition, Avinash Navlani , Armando Fandango , et al., February 2021.
7. Data Analysis Using Python by Dr. Samitha Khaiyum, Prof. Rakshitha Kiran P, Good Writers Publishing, 2023.
8. Mastering Power BI, Chandraish Sinha, 2021.
9. Power Query for Power BI and Excel, Christopher Webb and Crossjoin Consulting Limited, Apress, 2014.
10. Power BI Data Modeling: Build Interactive Visualizations, Learn DAX, Power Query, and Develop BI Models, Nisal Mihiranga, 2022.
11. Microsoft Power BI Complete Reference: Bring your data to life with the powerful features of Microsoft Power BI, Devin Knight , Brian Knight, et al., Packt Publishing Limited, 2018.
12. Learning Microsoft Power BI: Transforming Data into Insights (Grayscale Indian Edition), Jeremy Arnold, Shroff/O'Reilly, 2022.

## Suggested Readings:

1. Practical Data Science with Jupyter, Prateek Gupta, 2021.
2. Power BI for Jobseekers: Learn how to create interactive dashboards and reports, and gain insights from the data, Alan Murray, 2023.

	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>
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Programme	BA (Hons) Economics					
Course Name	Financial Regulation and Supervision					
Type of Course	DSE					
Course Code	UC5DSEECO301					
Course Level	300-399					
Course Summary	This course provides an in-depth look at the financial regulatory and supervisory landscape, both in India and globally. The primary goal is to help students grasp various concepts, ideas, and issues pertinent to financial regulation and focuses mor on banking sector and NBFC regulation. Understanding regulation and supervision—key mechanisms governing financial institutions—is crucial for effective microeconomic management of these entities. This course emphasizes conceptual understanding and is structured to offer a detailed exploration of these foundational elements, given its undergraduate level, and hence deliberately excludes debates and secondary developments to focus more on conceptual foundations.					
Semester	5	Credits			4	Total Hours

Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		4				60
Pre-requisites, if any						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome is to enable the students to	Learning Domains *	PO No
1	Understand the foundational principles of financial regulation and supervision.	U	1, 2, 3,
2	Analyse the regulatory norms and standards with respect to financial institutions.	An	9, 10
3	Evaluate the regulatory environment of banks, NBFCs etc.	E	9, 10
4	Understand how the leading developments like fintech and digital payments and lending are regulated in India.	U	1, 2, 8, 9, 10
5	Assess the various financial sector norms like NPA, CRAR and other institutional regulatory norms works.	An	1, 2, 4, 9, 10
6	Understand the interconnectedness among financial institutions and to assess the systemic risk and regulatory challenges.	U	1, 2, 3, 8, 9, 10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			



## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Financial Sector regulation as a macroeconomic policy</b>			
	1.1	<b>Economic Foundations of Financial Regulation and supervision</b> Role of central banks and other regulators in ensuring stable and healthy financial markets-Financial Stability-Financial Stability as a public good-Need for financial regulation and supervision-Financial Regulation: Meaning and Significance-Financial Supervision: Meaning and Scope- Prudential Regulation.	3	1, 2
	1.2	<b>Macroeconomics of financial regulation</b> Diversity of financial institutions and diversity of regulatory requirements- Moral Hazard -TBTF problem-Macroprudential regulations-Systemic Risk-Systemically important financial institutions -Systemically Important FIs in India.	6	1, 2, 3, 4
	1.3	<b>Financial Market Structure</b> Structure of India's banking sector: Commercial Banks (CBs)- Structure of the Cooperative Banks-Structure of NBFCs-Structure of the Capital Market-Interconnectedness between banks, NBFCs and fintechs.	3	1, 2, 3
	1.4	<b>Major Financial Sector Regulators in India</b> An overview of the function of the major financial regulators in India: RBI, SEBI, IRDA, PFRDA and FSDC.	3	1, 2, 3, 4, 5, 6
<b>2</b>	<b>Regulation and Supervision of the banking sector by the RBI</b>			
	2.1	<b>Regulatory norms for SCBs</b> RBI's role in banking sector regulation- Universal Banks-Significance of Banking Regulation Act and Bank Nationalisation Acts (overview only)- Regulatory requirements for SCBs: SLR, CRR, CRAR and capital adequacy norms in India-Liquidity support by the RBI through LAF window to banks-Deposit Insurance- Recent changes in the financial regulatory approach of the RBI-Tiered approach for UCBs.	4	1, 2, 5, 6

	2.2	<b>NPA norms and other regulations</b> Income recognition-Asset Classification-Standard assets- NPA: Substandard asset, doubtful asset, loss asset-Stressed Asset-Written off assets-Restructured loans-Provisioning norms, PCR-Risk weights-Prompt Corrective Action Plan- Stress testing-Problem of pro-cyclical lending.	3	1, 2, 3, 5, 6
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	2.3	<b>Basel III Capital Standards</b> Importance of capital enhancement for banks- Basel III capital standards-Risks under Basel III: operational risk, credit risk, market risk and liquidity risk-Liquidity coverage ratio-Leverage ratio- Capital Buffers.	4	
	2.4	<b>Financial Supervision norms by the RBI</b> Meaning and objectives of supervision-BFS-Risk based supervision-CAMELS, CALCS, SPARC, OSMOS-Principles of governance for banks-Assurance functions.	4	1, 2, 3, 5.
<b>3</b>	<b>Regulation of NBFCs, capital market and the fintech sector</b>			
	3.1	<b>Regulation of NBFCs</b> Growth of NBFCs in recent years and importance of regulation- Classification of NBFCs-Major regulatory measures by the RBI for NBFCs-LTV norms-Scale based regulation.	6	1,3, 5, 6
	3.2	Regulatory convergence between banks and NBFCs-Co-lending and On-lending- Regulatory norms for MFIs in India-Regulation of the fintech sector and crypto assets.	4	1, 3, 5,6
	3.3	<b>Regulation of the capital market by SEBI</b> Primary market and Secondary market regulations- Types of Capital issues in the Primary Market -Eligibility Norms for Making Capital Issues-Intermediaries in an issue in the Primary Market-Regulatory requirements for making an IPO.	5	1,2
<b>4</b>	<b>Leading Regulatory developments in India</b>			
	4.1	<b>Resolution, Insolvency mechanisms and Customer Redressal in India</b> Financial Resolution-Insolvency and Liquidation-Hair Cutting- IBC- SARFAESI Act-ARCs-Integrated Ombudsman Scheme by the RBI (entire sub module is conceptual level).	4	1,2, 3,5

	4.2	<b>Interest rate regulations</b> Evolution of interest rate regulation in the post reform period: Prime Lending Rate (PLR), BPLR, Base rate, MCLR and external benchmark-based lending rate-Financial benchmarking and FBIL (concept level).	3	1,2, 5, 6
	4.3	<b>Customer disclosure guidelines and related regulations</b> CRILC-Public Credit Registry-KYC norms-Operational Aspects of KYC-Wire Transfers-Central KYC Records Registry (CKYCR)- Operational aspects of CIBIL Score.	3	1, 2, 3,4, 5, 6
	4.4	<b>Financial Market Interconnectedness</b> Meaning, importance and process of Interconnectedness of financial markets-Reasons for interconnectedness-Heterogeneity of Financial Markets-Achievement of market Integration in India.	5	6
<b>5</b>	<b>Teacher specific Module</b>			

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<b>Teaching and Learning Approach</b>	<p><b>Suggested Classroom Procedure (Mode of transaction)</b></p> <p><b>CD 1- Lecture-Based Instruction</b></p> <p><b>CD 2: Self learning:</b> through various RBI, SEBI and other publications.</p> <p><b>Case 3.</b> Case Study Analysis: based on leading financial sector developments.</p> <p><b>CD 4 - Group Discussions:</b> Current financial sector issue that have systemic ramifications.</p> <p><b>CD 5 - Interactive Workshops:</b> on Financial Sector Regulatory Guidelines.</p> <p><b>CD 6 -Chart Making:</b> Structure of banks and NBFCs.</p> <p><b>CD 7: Assignments:</b> on any of the topic that the teacher found best suitable.</p>
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Assessment Types	MODE OF ASSESSMENT			
	A. Continuous Comprehensive Assessment (CCA) – 30 Marks			
	Particulars		Marks	
	Assignment/Mock exercise/Lab test		10	
	Mini project		10	
	Report writing and presentation		10	
	Total		30	
	B. Semester End examination			
	Written Examination (MCQ 10 marks and Written Answers 60 marks)			
	Descriptive type	Word Limit	Number of questions to be answered	Marks
	Short Answer	50 words	10 out of 15	10 x 2 = 20
	Short Essay	150 words	10 out of 15	10 x 5 = 50
	Total			70

### References

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3. Allen, Franklin and Gale, Douglas - "Understanding Financial Crises", Oxford University Press, 2007.
4. Reserve Bank of India - "Annual Report on Banking in India", RBI, annually updated.
5. RBI Guidelines - "Master Circular - Prudential norms on Capital Adequacy and Market Discipline - Basel III Norms", RBI, annually updated.
6. Reserve Bank of India - "Trends and Progress of Banking in India", RBI, annually updated.


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8. Reserve Bank of India - "Master Circular - Supervisory Framework for NBFCs", RBI, annually updated.
9. Securities and Exchange Board of India (SEBI) - "Annual Report", SEBI, annually updated.
10. Gomber, Peter, Koch, Jascha-Alexander and Siering, Michael - "Digital Finance and FinTech: current research and future research directions", Journal of Business Economics, 2017.
11. Insolvency and Bankruptcy Board of India - "Annual Report", IBBI, annually updated.
12. Reserve Bank of India - "Report on Trend and Progress of Banking in India", RBI, annually updated.
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14. Haldane, Andrew G. and May, Robert M. - "Systemic risk in banking ecosystems", Nature, 2011.
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16. Lastra, Rosa María - "Legal Foundations of International Monetary Stability", Oxford University Press, 2006.
17. Tarullo, Daniel K. - "Banking on Basel: The Future of International Financial Regulation", Peterson Institute for International Economics, 2008.
18. Acharya, Viral V., Cooley, Thomas, Richardson, Matthew, and Walter, Ingo - "Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance", Wiley, 2011.
19. Llewellyn, David T. - "The Economics of Banking", Wiley, 2005.
20. Blinder, Alan S. - "After the Music Stopped: The Financial Crisis, the Response, and the Work Ahead", Penguin Press, 2013.
21. Barth, James R., Caprio, Gerard Jr., and Levine, Ross - "Rethinking Bank Regulation: Till Angels Govern", Cambridge University Press, 2006.
22. Goodhart, Charles A.E. - "The Basel Committee on Banking Supervision: A History of the Early Years 1974-1997", Cambridge University Press, 2011.

### **Suggested Readings**

1. Caprio, Gerard Jr., Hanson, James A., and Litan, Robert E. (Editors) - "Financial Crises: Lessons from the Past, Preparation for the Future", Brookings Institution Press, 2005.
2. Shiller, Robert J. - "Finance and the Good Society", Princeton University Press, 2012.
3. Singh, Dalvinder - "Banking Regulation of UK and US Financial Markets", Ashgate Publishing, 2007.
4. LaBrosse, John Raymond, Olivares-Caminal, Rodrigo, and Singh, Dalvinder

- (Editors) - "Financial Crisis Management and Bank Resolution", Informa Law from Routledge, 2009.
5. Green, Edward J., Bordo, Michael D., and Rockoff, Hugh - "A History of Financial Regulation in the United States", Edward Elgar Publishing, 2011.
  6. Hall, Maximilian J.B. - "Banking Regulation and Supervision: A Comparative Study of the UK, USA and Japan", Edward Elgar Publishing, 1999.
  7. Macey, Jonathan R. - "The Death of Corporate Reputation: How Integrity Has Been Destroyed on Wall Street", FT Press, 2013.
  8. Kane, Edward J. - "The S&L Insurance Mess: How Did It Happen?", Urban Institute Press



<div>Est. in 1921</div> <div></div>		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Actuarial Science and Risk Management in Insurance</b>					
<b>Type of Course</b>	<b>DSE</b>					
<b>Course Code</b>	<b>UC5DSEECO302</b>					
<b>Course Level</b>	<b>300-399</b>					
<b>Course Summary</b>	<p>This comprehensive course covers foundational concepts in actuarial science, economic principles of insurance, risk management strategies, and organizational aspects of insurance product development and claim assessment. Students will learn about mortality tables, actuarial valuation techniques, financial underwriting, and micro-insurance regulations, providing a solid understanding of the insurance industry's core practices. Additionally, the course delves into risk theory, risk management processes, marketing strategies for insurance products, and the construction of claim development triangles to assess ultimate claims. Practical components include case studies, simulations, and group projects to apply theoretical knowledge and develop practical skills essential for careers in actuarial science, insurance, and risk management. By the end of this course, students will be equipped with a comprehensive understanding of insurance operations and prepared to tackle real-world challenges in the industry.</p>					
<b>Semester</b>	<b>5</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	<b>Others</b>	
		<b>4</b>				
<b>Pre-requisites, if any</b>						

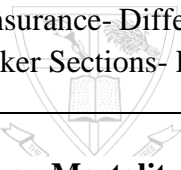


**COURSE OUTCOMES (CO)**

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the students will be able to:</i>	<b>Learning Domains *</b>	<b>PO No</b>
1	Understanding basic foundations in insurance and risk and uncertainty	U	
2	Analyze risk theory and probability to evaluate and classify risks. Assess risk attitudes and costs associated with risk management.	An	
3	Analyse the purpose and objectives of financial underwriting, demonstrating knowledge of insurable interest, value assessment, and personal insurance cover.	An	
4	Evaluate the behavior and decision-making processes of consumers, insurers, and regulators in the insurance market, applying intuitive thinking and safety-first principles to insurance practices.	E	
5	Evaluate departmentalization strategies in the context of insurance operations and Explore alternative formats of claim development triangles and their respective uses	E	
6	Analysing of risk management principles, enabling them to contribute effectively to organizational risk mitigation strategies and decision-making processes.	An	
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

**COURSE CONTENT****Content for Classroom Transactions (Units)**

<b>Module</b>	<b>Units</b>	<b>Course description</b>	<b>Hrs</b>	<b>CO No.</b>
<b>1</b>	<b>Foundation Of Actuarial Science</b>		<b>18</b>	
	1.1	Meaning - Scope – History And Importance-- Probability- Mortality Table-Factors Influencing Mortality Assumptions For A New Insurance Product— Importance of insurance industry	4	1

	1.2	Introduction to profession and professionalism - Evolution of Actuarial Profession - Characteristics of the ideal profession - characteristics of Actuarial profession - Skills required for the Actuary	4	1
	1.3	Role of Actuaries - Role of Actuary in Life Insurance Business - Valuation of Liabilities - Profit distribution - Product Design and Product pricing - Assessment of solvency - Investigation of Investment policy - Investigation of New Business Risks	3	1
	1.4	Financial Underwriting-Purpose of financial underwriting - Objectives of financial underwriting - Concept of Insurable interest & Insurable value - Personal Insurance CoverHuman Life Value	3	3
	1.5	Social & Rural Insurance Micro Insurance Concept-Micro Insurance Regulations-Social Group Insurance- Different Government Schemes For Weaker Sections- Rural Areas.	4	1
<b>Practicum:</b>	 <ol style="list-style-type: none"> <li><b>1 Discussion on Mortality Tables:</b> Analyze and interpret mortality tables to understand factors influencing mortality assumptions for insurance products.</li> <li><b>2. Case Study on Actuarial Valuation:</b> Evaluate a case study involving actuarial valuation techniques for liabilities, profit distribution, and product pricing in the context of life insurance.</li> <li><b>3. Simulation Exercise on Financial Underwriting:</b> Conduct a simulation exercise to demonstrate the process and importance of financial underwriting, focusing on insurable interest, value, and personal insurance cover.</li> <li><b>4. Group Presentation on Social Insurance:</b> Collaboratively prepare and present a case study on micro-insurance concepts, regulations, and government schemes aimed at weaker sections in rural areas.</li> </ol>			

<b>2</b>	<b>Economic Overview Of Insurance</b>		<b>22</b>	
	2.1	Risk And Insurance – Demand For Insurance – Elasticity Of Demand For Insurance – Price – Income – Cross Elasticity. Supply Of Insurance	6	2
	2.2	Pricing Of Insurance – Economic And Social Benefits Of Insurance – Social Cost Of Insurance – Factors Affecting Insurance Consumption- Assur Banking – Bancassurance-Types Of Group Insurance In India Group Gratuity- Group Superannuation- GSLI- Group Credit Insurance - Group Insurance In Lieu Of EDLI.	9	2
	2.3	Intuitive Thinking By Consumers , Insurers And Regulators- Insurer Behavior - <i>Safety First</i> Model - Guiding Principles For Making Insurance	7	4
<b>Practicum</b>	<ol style="list-style-type: none"> <li><b>Group Presentation on Group Insurance:</b> Prepare and deliver a group presentation on different types of group insurance schemes prevalent in India, highlighting their features and benefits.</li> <li><b>Role-play on Insurer Decision-making:</b> Conduct a role-play exercise to simulate the decision-making process of insurers, consumers, and regulators, focusing on safety-first principles and guiding insurance principles.</li> </ol>			
<b>3</b>	<b>Risk Management</b>		<b>26</b>	
	3.1	Risk And Uncertainty – Loss, Risk- Hazard- Peril- Types Of Risk- Need For Security Against Economic Difficulties - Risk Theory and Probability -, Risk classification, Risk attitudes, Risk costs	4	1
	3.2	Risk Management Process – Risk Management – Scope and Objectives - Risk management approach, Risk management- definition and basic components, Risk management – contributions and benefits, Strategic management vs. Risk management -Risk Management And Insurance,– Risk management matrix-Risk Management Of Life Insurance Companies – Insurance Company Operations- Professionals in risk management –Emerging risks –	8	6

		Challenges in risk management.		
	3.3	Asymmetric Information And Insurance- Moral Hazard And Insurance, Insurance And Selection Problems, Single Crossing Property; Imperfect Information:	6	6
	3.4	: Pooling, Contract, Separate Insurance- Methods Of Handling Risk- Building up an effective Risk Management Programme - Deciding the programme objectives, Defining the role, responsibilities and function of risk manager, rganising and putting the programme in place, Formulating a risk management polic	4	6
	3.5	Risk Transfer methods and their utility - Alternative risk transfer market, Finite risk reinsurance and risk transfer to the capital markets, Capital markets as an additional source of capacity, Alternative risk financing products.	4	6
<b>Practicum</b>	<ol style="list-style-type: none"> <li><b>Guest Lectures:</b> Attend guest lectures by industry professionals in risk management. Gain insights into emerging risks and current trends in the field.</li> <li><b>Risk Management Plan Development:</b> Collaborate in teams to develop comprehensive risk management plans for hypothetical or real organizations. Present and defend these plans based on industry standards and best practices.</li> </ol>			
<b>4</b>	<b>Organisational Structure And Product Development- Claim Development</b>		<b>19</b>	

	4.1	Types Of Organizational Structure – Departmentalization – Marketing Strategies For Insurance Products	5	5
	4.2	Developing A Marketing Mix For Insurance Companies – Product Development Process Of Insurance Companies	7	5
	4.3	Construction of Claim Development Triangle and its use as a pointer to ultimate claims - Rows,Diagonals and Columns, Alternative Format of Development Triangles, Detailed Example of Claim Development Triangles, Other Types of Development Triangle	7	5
<b>Practicum:</b>	1. Construct and interpret claim development triangles using real-world data sets. 2. Develop a comprehensive marketing mix for a specific insurance product or service. 3. Collaborate in teams to design and present new insurance product concepts.			
5				
	<b>Teacher Specific Module</b>			

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"> <li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li> <li>o CD2 - Tutorials/Assignments</li> <li>o CD3 - Class Seminars</li> <li>o CD4 - Peer group discussions</li> </ul>
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<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b>	
	<b>A. Continuous Comprehensive Assessment (CCA) – 30</b>	
	<b>Marks</b>	
	<b>Particulars</b>	<b>Marks</b>
	Class Tests	15
	Assignments	5
	Seminar/Viva	5
	Practicum	5



	<b>Total</b>		<b>30</b>	
	<b>B. Semester End examination</b> Written Examination ( <b>70 marks</b> )			
	<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	6 out of 9	6 x 5 = 30
	Essays	450 words	2 out of 4	2 x 15 =30
	<b>Total</b>			<b>70</b>

### Reference

1. Bodla. \*Insurance Management\*. Deep & Deep Publications, Delhi, 2008.
2. Bowers, Newton L., et al. \*Actuarial Mathematics\*. 2nd ed., Society of Actuaries, 1997.
3. Dickson, David C. M., Mary R. Hardy, and Howard R. Waters. \*Actuarial Mathematics for Life Contingent Risks\*.
4. Dorfman, S. Mark. \*Introduction to Risk Management and Insurance\*. Prentice Hall India, 2005.
5. Gupta, P.K. \*Fundamentals of Insurance\*. Himalaya Publishing House, Mumbai, 2008.
6. Hull, John. \*Risk Management and Insurance\*.
7. Mishra, K.C., and L.S. Kumar. \*Elements of Actuarial Science\*. National Insurance Academy Cengage Learning, New Delhi, 2009.
8. Mishra, K.C., and Mangalabakshi. \*Insurance Business Environment and Insurance Company Operations\*. National Insurance Academy | Cengage Learning, New Delhi, 2009.
9. Mishra, M.N., and S.B. Mishra. \*Insurance, Principles and Practice\*. S. Chand And Company, New Delhi, 2008.
10. Palande. \*Insurance in India\*. Sage Publications, Delhi.
11. Patukale. \*Insurance for Everyone\*. Macmillan India Ltd, 2009.
12. Periasami, P. \*Principles and Practice of Insurance\*. Himalaya Publishing House, Mumbai, 2008.


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14. Tripathy, and Pal. \*Insurance: Theory and Practice\*. Prentice-Hall of India, 2005.
15. Vaughan, Emmett J., and Therese M. Vaughan. \*Essentials of Risk Management and Insurance\*.

Journal Articles:

1. Hiller, Brian. "Economics of Asymmetric Information."
2. Hun Seog, S. "Economics of Risk and Insurance." Wiley-Blackwell.
3. Harrington, Scott E., and Gregory R. Niehaus. "Risk Management and Insurance." Tata McGraw-Hill, 2nd ed., 2004.
4. Gidhagen, Mikael. "Insurance Marketing: Services and Relationships."
5. Kunreuther, Howard, and Mark Pauly. "Behavioral Economics and Insurance: Principles and Solutions." Working Paper, 2014.





<div>Est. in 1921</div> <div></div>		<div>UNION CHRISTIAN COLLEGE, ALUVA</div>		
Programme	BA (Hons) Economics			
Course Name	Digital Economy and Business Transformation			
Type of Course	DSE			
Course Code	UC5DSEECO303			
Course Level	300-399			
Course Summary	<p>This Course is aimed to provide the basics of digital economics and promote digital entrepreneurship by empowering students with digital skills that helps them for starting own digital business. Through this core course, a first-hand information on digital business transformation avenues from the digital economy angle is to be delivered with an interdisciplinary approach. Familiarising the application of the various digital economy tools for economic and business facilitation is to be done through different modes. The content in this course should be delivered from the use and application side rather than from technical development side. Economic conceptual integration of the topics with digital field is mandatory. Student should learn basic microeconomics and macroeconomics courses before attempting this course. The various tools mentioned in this course need not be purchased to provide the information; rather, a demonstration about their profile, features etc. with the help of the internet is sufficient. For giving a practical orientation of the topics, use of computer lab is highly desirable. .</p>			
Semester	5	Credits	4	Total

Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	Hours
		4				60
<b>Pre-requisites, if any</b>	Knowledge in microeconomics and macroeconomics. Computer lab facility is a desirable pre requisite for this course. A one day training programme for the teachers can be arranged before launching the course.					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome is to enable the students to	Learning Domains *	PO No
1	Understand the opportunities and methods for transforming business in the digital economy and the power of network economics.	U	1, 2, 3
2	Create a structured approach to develop own digital business enterprise.	C	10, 5, 9
3	Apply the skills on the various methods of digital business transformation.	A	10, 9
4	Design an effective promotional campaign and branding for digital business.	C	9, 10, 5
5	Understand the avenues of cloud and AI platforms to improve business productivity.	U	9, 3
6	Develop the various skills on methods and process in building digital presence.	A, S	5, 3, 10.
7	Create awareness about the ethical and safety principles in the digital world.	C	6, 7, 8, 10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

#### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>An introduction to Digital Economy and Business Transformation.</b>			
	1.1	Digital Economics and Digital Economy-Digital Economy and Digital Transformation and Digital Entrepreneurship-Meaning and Significance.	3	1

	1.2	Overview of the digital economy and digital technologies including social media, Cloud, AI, Blockchain Technology etc.– the rise of Platform Economy.	6	1,5,6
	1.3	Benefits of Digital Transformation: Productivity and Efficiency gains, Business Expansion and Growth.	3	1
	1.4	Network Economics- Network effects and Metcalfe's Law-Case Studies-Startup Policy in India.	3	1
	<p>Group Discussion: Network economics and its benefits for corporate like Google and Meta.</p> <p>Group Discussion: the significance of building a community in digital platforms.</p>			
<b>2</b>	<b>Platforming Digital Business Transformation- Basic Tools and Security Issues.</b>			
	2.1	Establishing Digital Business- Digital Platforms for Enterprise Development including Google Business Profile-Google Workspace- Google Analytics.	4	2, 3, 6
	2.2	Location and mapping solutions for business: Google Maps API- Social Networking, userbase and branding-YouTube and meta platform.	3	2, 3, 6
	2.3	Role of Cyber security in digital economy-Digital Security-Digital Privacy-Data Security -User Authentication and Authorisation-IPR and Digital Rights-Ethical, Safety, Security and other principles- Edge computing.	4	7
	2.4	Social engineering attacks-Government regulations in India regarding digital security.	4	7
	<p>Group Discussion: Evolution of educational content- the rise of video- in place of text - merits and demerits.</p> <p>Mini Project: How to start a Google Business Page/Google Map API for your business.</p>			
<b>3</b>	<b>Digital Economy and Ecommerce</b>			
	3.1	Digital pricing methods-Price elasticity of digital goods-Economics of cloud computing-HRM Software and their use in enterprise management.	2	1,6
	3.2	Content Management Systems-Learning Management Systems- Personalised/Adaptive Learning and their significance in e-learning.	3	1
	3.3	Website Domain Creation-Hosting and Search Engine Optimisation (concepts only)- Apps and their significance in	4	3, 6

		digital business.		
	3.4	Ecommerce payment gateways-e-commerce platforms (concept only), Setting up of an online store /creating online seller license in ecommerce platforms- India Stack-ONDC-Getting Aadhar verification services for business-Government e-Marketplace (GEM).	6	1,5
	<p>Experimental Learning: Use of various Microsoft office applications and cloud storage in business facilitation.</p> <p>Discussion: the role of Learning Management Systems in education.</p>			
<b>4</b>	<b>Economics of Artificial Intelligence and Robotics</b>			
	4.1	Economics of digital branding-Advantages of digital branding and advertising-Branding and advertisement in major social media platforms: Meta, LinkedIn, YouTube, Google ad sense-ads manager/ad settings.	5	1, 4
	4.2	Economics of technological change and productivity expansion- Artificial Intelligence and IoT -challenges and opportunities. An	5	6
		overview of different AI tools/apps in task management and productivity enhancement.		
	4.3	Economic implications of large language models and neural networks-Survey of different AI applications in industry, services (including education) and agriculture- Digital economy and international Trade: the issue of cross national data flows.	5	5, 6
	<p>Group discussion: Use of AI in skill formation.</p> <p>Industry Visit: To offices and service centres of corporate that provide important digital business services.</p>			
<b>5</b>	<b>Teacher specific Module</b>			

	<p><b>Suggested Classroom Procedure (Mode of transaction)</b></p> <p><b>CD 1 - Demonstration:</b> Demonstration of the digital tools using mobile phones or laptops can be used as a prime mode to introduce the students the digital tools and platforms covered in this course. Examples are the creation of business profile, social media ad management campaign etc. Demonstration of the design elements of LMS, various features of Office 365, Cloud, Google Map</p>
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**Teaching  
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API etc, should be done while going through the relevant topics.

**CD 2- Lecture-Based Instruction:** For most digital concepts and their scope and application for digital enterprise development, lecture classes can be adopted.

**CD 3: Skill Generation Exercises:** Starting of ecommerce seller license, prerequisites needed for starting a website (without the development part) etc.

CD4: Use of digital content for skill generation: Instruct the students to prepare a list of YouTube videos that helps them to develop the various digital skills like managing the Office 365, Google Workspace, Google Business Profile etc.

**CD 4: Self learning:** Instructing students to visit websites like GEM, Google Map API, DigiLocker, Digital Marketing etc. to prepare a report on their working and create a brief note on how they may help them to develop/run their own business enterprise.

**Case 5. Case Study Analysis:** Understand real-world case studies to illustrate the application of exploratory, descriptive, diagnostic, evaluation, action research, experimental, analytical, historical, survey, and field study methods.

**CD 6 - Group Discussions:** Conduct group discussions to explore the different opportunities of AI in facilitating productivity and digital business entrepreneurship.

**CD 7 - Interactive Workshops:** Interactive workshops can be conducted on methods for digital branding.

**CD 8 -Chart Making:** Charts can better express and map out the numerous issues related with digital security.

**CD 9-Computer Lab Sessions:** Engage students in the computer lab for familiarising the various digital skills instructed in this course.

	<p><b>CD 10: Mock Exercises:</b> Online ad campaigns can be experimented by using any of the stipulated digital ad platforms (upto ad settings using the ad manager is enough).</p> <p><b>CD 11: Assignments:</b> Information from digital sources in the form of text, images, videos and links can be consolidated and presented on selected topics like the use of various digital tools, running of digital advertisements etc (this should be kept in digital format using images, links, textual contents, videos if needed) and this should be regarded as assignments.</p>			
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b>			
	<b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b>			
	<b>Particulars</b>			<b>Marks</b>
	Assignment/Mock exercise/Lab test			10
	Mini project/Class test			10
	Report writing and presentation after making an industry visit			10
	<b>Total</b>			<b>30</b>
	<b>B. Semester End examination</b>			
	Written Examination			
	<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	50 words	10 out of 15	10 x 2 = 20
	Short Essay	150 words	10 out of 15	10 x 5 = 50
	<b>Total</b>			<b>70</b>


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1. Big Tech and the Digital Economy: The Moligopoly Scenario, Nicolas Petit, OUP Oxford, 2022.
2. Cyber Security, Artificial Intelligence, Data Protection and the Law, Rober Walters, Marko Novak, Springer, 2021.
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4. Digital Economics, Avi Goldfarb and Catherine Tucker, NBER, 2017.
5. Digital Economy (practical Guide): Economic Development and Digital transformation, Gilbert Saldivar, Lew Temple, FRESHMAN, Kindle Edition, 2021.
6. Digital Economy and International Trade: Transnational Data flows regulation, Robert Walters, Wolters Kluwer, 2022.
7. Digital Transformation: Build Your Organization's Future for the Innovation Age, Herbert Lindsay, Bloomsbury Business India, 2017.
8. Digital Transformation: Survive and Thrive in an Era of Mass Extinction, Siebel M Thomas, Rodin Books, 2019.

9. Economic Impacts of Artificial Intelligence (AI), European Parliamentary Research Service, July 2019.
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13. Principles of Digital Economics: Innovation Theory in the Age of Intelligence, Zhiyi Liu, Springer, 2022.
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17. The Economics of Artificial Intelligence, Ajay Agrawal, Gans Joshua and Avi Goldfarb, Oxford University Press, 2019.
18. The Economics of Digital Transformation, Katarzyna Śledziowska and Renata Włoch, first published 2021, Routledge.
19. The Oxford Handbook of the Economics of Networks, Yann Bramoullé, Andrea Galeotti, et al., Oxford Handbooks, 2016.
20. Winning in The Digital Age, Penguin Enterprise, Seth Nithin, 2021.
21. Working with Microsoft Office 365 – Running Your Small Business in the Cloud, Hill Brett, Microsoft Press US, 2012.

### **Suggested Readings**

1. Booming Digital Stars: 11 Inspiring Journeys from India's Creator Economy, Harsh Pamnani and Manish Pandey, 2021, Pencil Select.
2. Digital Economy Report 2021, UNCTAD, 2021.
3. The Age of the Platform: How Amazon, Apple, Facebook, and Google Have Redefined Business, Simon Phil, Simon Hris Consulting, 2011.

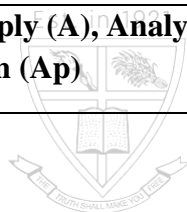
<p>Est. in 1921</p> 	<h1>UNION CHRISTIAN COLLEGE, ALUVA</h1>
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<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Public Economics - I</b>					
<b>Type of Course</b>	<b>DSE</b>					
<b>Course Code</b>	UC5DSEECO304					
<b>Course Level</b>	<b>300-399</b>					
<b>Course Summary</b>	<p>Public economics is an academic discipline that examines government policy through the lenses of economic efficiency and equality. This study examines the characteristics of government involvement and its consequences on the allocation, distribution, and stabilization aspects. This subject inherently entails a rigorous investigation of government revenue and expenditures and institutions behind it.</p>					
<b>Semester</b>	4	<b>Credits</b>			4	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/Practicum</b>	<b>Others</b>	
		4				60
<b>Prerequisites, if any</b>						



## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	examine and evaluate the fiscal operations and policies of governments.	An	1
2	examine types and components of budget, public revenue, public expenditure and public debt	An	1
3	evaluate the principles and theories underlying public economics	E	2
4	explain the process of resource transfer between Centre and state	U	6
5	analyze and evaluate fiscal operations in India	E	1
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			



## COURSE CONTENT

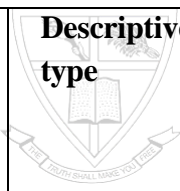
### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
		<b>Introduction to Public Economics</b>	<b>12</b>	
<b>1</b>	1.1	Meaning and scope of Public Economics- Fiscal Functions-Allocation, distribution and stabilization	3	1
	1.2	Principles of Maximum Social Advantage- Dalton, Musgrave	5	4

	1.3	Private and public goods concepts and types -Market failure and the role of government.	4	1
<b>2</b>	<b>Public Revenue</b>		<b>15</b>	
	2.1	Sources of Public Revenue- Tax and Non Tax Sources - Classification of Taxes - Impact, Incidence and Shifting of Tax Burden - Effects of taxation	6	2
	2.2	Canons of Taxation-Principles of taxation: Benefit, Ability, and Cost of Service	5	3
	2.3	Tax structure in India- Direct and indirect	4	5
<b>3</b>	<b>Public Expenditure and Public Debt</b>		<b>18</b>	
	3.1	Public Expenditure meaning -Canon's of Public Expenditure	3	1
	3.2	Theories of public Expenditure -Wagner's Hypothesis, Peacock -Wiseman Hypothesis, Critical limit hypothesis - Effects of public expenditure	9	3
	3.3	Public debt- Types- Debt redemption – Burden of public debt	3	1
	3.4	Public expenditure and public debt in India: pattern and growth	3	5
<b>4</b>	<b>Government Budget and Federal Finance</b>			

	4.1	Budget: Meaning, Types – Classification : Revenue and Capital budget - Revenue deficit, fiscal deficit, primary deficit- Budget deficit - Preparation of budget in India-FRBM Act (details not needed)	7	2
	4.2	Fiscal Policy- Countercyclical Fiscal policy- Deficit financing	4	1
	4.3	Fiscal federalism in India – Finance commission – Current Finance Commission.	4	5
<b>Practicum:</b>	1. Discussion on the latest norms governing resource transfer between Centre and states in India 2. Discussion on the latest Union and state budgets. 3. Discussion on the concept of deficit financing			
<b>5</b>	<b>Teacher specific Module</b>			

<p><b>Teaching and Learning Approach</b></p>	<p><b>Classroom Procedure (Mode of transaction)</b></p> <p>Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge</p> <p>Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions</p> <p><b>Suggested Course Delivery Methods</b></p> <ul style="list-style-type: none"> <li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li> <li>o CD2 - Tutorials/Assignments</li> <li>o CD3 - Class Seminars</li> <li>o CD4 - Peer group Discussions</li> </ul> <p>195</p>
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Assessment Types	MODE OF ASSESSMENT			
	A. Continuous Comprehensive Assessment (CCA) – 30 Marks			
	Particulars			Marks
	Class Tests			15
	Assignments			5
	Seminar/Viva			5
	Project/Practicum/Quiz/Book Review/Fieldwork etc.			5
Total			30	
	B. Semester End examination			
	Written Examination (MCQ 10 marks and Written Answers 60 marks)			
	Est. in 1921			
	 Descriptive type	Word limit	Number of questions to be answered	Marks
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	4 out of 7	4 x 5 = 20
	Essays	450 words	2 out of 4	2 x 15 = 30
MCQ	NA	10	10 x 1 = 10	
Total			70	


## References

1. Bhatia. H.L. (twenty-sixth edition). *Public finance*. New Delhi: Vikas Publishing House
2. Musgrave, R.A. and P.B. Musgrave. (1989). *Public finance in theory and practice*. McGraw Hill
3. Singh.S.K. (Ninth edition) *Public Finance in Theory and Practice*. New Delhi: S Chand Publications
4. Stiglitz, Joseph E. (Third edition). *Economics of public sector*. New York: Norton.

## Suggested Readings

1. Bagchi, Amaresh (ed.). *Readings in public finance*. New Delhi: Oxford University Press.
2. Dalton. H. (eleventh edition). *Principles of Public finance*. Routledge Library Editions.
3. Gupta, Janak. (2nd Revised & Enlarged edition). *Public economics in India: Theory and practice*. Atlantic.
4. Harbar, Bernard. P. (Fifth edition). *Modern public finance*. Richard Irvin Inc.
5. John Cullis, Philip Jones. *Public finance and public choice*. (1st edition). New Delhi: Oxford University Press.
6. Taylor, Philip E. *Economics of public finance*. MacMillan. Pvt. Ltd.
7. Ulbrich, Holley H. *Public Finance in Theory and Practice*. Thomson South-Western.



<p>Est. in 1921</p> 	<p><b>UNION CHRISTIAN COLLEGE, ALUVA</b></p>
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<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Institutional Economics</b>					
<b>Type of Course</b>	<b>DSE</b>					
<b>Course Code</b>	UC5DSEECO305					
<b>Course Level</b>	<b>300-399</b>					
<b>Course Summary</b>	<p>This course attempts to provide an understanding of economic institutions, which is rooted in a conceptual and theoretical apparatus. It is aimed that at the end of the course students will be in a position to embark on theoretical, public policy or empirical research projects using the tools and insights of institutional economics. Overview of Institutional Economics · Economic Organization · Contracting · Employment · Bureaucracy Government and State · Law, Economics, and Organization · Regulation · Empirical Institutional Economics</p>					
<b>Semester</b>	<b>5</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical</b>	<b>Others</b>	
		4				60
<b>Pre-requisites, if any</b>	Studying institutional economics typically involves a multidisciplinary approach that combines elements of economics, sociology, political science, or history.					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	apply the theory of institutions in the analysis of institutional environment in different contexts	A	1,2
2	apply the instruments of game theory to analyse institutions	A	2,4
3	evaluate Property Rights in the context of Institutional Economics	E	3
4	evaluate social cost and public policy in institutional change	E	5
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

#### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.

<b>1</b>	<b>Introduction to Institutional Economics</b>		<b>18</b>	
	1.1	Institutional economics –concept and significance.	4	1
	1.2	Historic development of Institutional Economics- Institutional Economics as a departure from Neo-Classical and Marxian Economics - Theory of the Leisure Class (Concepts Only).	5	1
	1.3	Old and New Institutional Economics- Core issues in New Institutional Economics.	5	1
	1.4	Institutional Change Theories-Economic Agents and Institutional Environment-Individuals, Firms, and Governments in Institutional Analysis-Legal and Regulatory Frameworks-Social Norms and Culture in Economic Behaviour	4	1
<b>2</b>	<b>Institutions and Economic Development</b>		<b>11</b>	
	2.1	Role of institutions in Economic Development	1	2
	2.2	The long term determinants of Economic growth.	5	2
	2.3	Hardin’s Tragedy of Commons , Collective Action	5	2
<b>3</b>	<b>Fundamental Institutions: Property, Decentralization, and Contract</b>		<b>13</b>	
	3.1	Concepts of Property and defining Property Rights	4	3
	3.2	Problems of ill-defined Property rights, Externalities-Market failure and property rights, Social vis-à-vis Individual Choices, Neo-classical Maximisation vis-à-vis Methodological Individualism	4	3
	3.3	Decentralisation and Contracts –Religion Individuals, Firms, and Governments in Institutional Analysis-Legal and Regulatory Frameworks-Social Norms and Culture in Economic Behaviour (Concepts Only)	5	3
<b>4</b>	<b>Institutions in Practice</b>		<b>18</b>	
	4.1	Issues relating to transaction costs, Social cost vis-à-vis individual costs-Network Theory	5	4
	4.2	Identification and measurements of transaction costs - Coase Theorem - Bounded Rationality	4	4
	4.3	Static and dynamic institutional change – Firms and Markets – State intervention	4	4
	4.4	Public Policy - Insurance Sector - Social issues - Ecological and Environmental Issues	3	4
	4.5	Institutional failures in development economics	2	3
<b>5</b>	<b>Teacher specific Module</b>			



<b>Teaching and Learning Approach</b>	Classroom Procedure (Mode of transaction) Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>o CD2 - Tutorials/Assignments</li><li>o CD3 - Class Seminars</li><li>o CD4 - Peer group Discussions</li></ul>																											
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table><tr><th colspan="3">Particulars</th><th>Marks</th></tr><tr><td colspan="3">Class Tests</td><td>15</td></tr><tr><td colspan="3">Assignments</td><td>5</td></tr><tr><td colspan="3">Seminar/Viva</td><td>5</td></tr><tr><td colspan="3">Project/Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr><tr><td colspan="3">Total</td><td>30</td></tr></table>				Particulars			Marks	Class Tests			15	Assignments			5	Seminar/Viva			5	Project/Practicum/Quiz/Book Review/Fieldwork etc.			5	Total			30
Particulars			Marks																									
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Total			30																									
	<b>B. Semester End examination</b> <b>Written Examination (MCQ 10 marks and Written Answers 60 marks)</b> <table><tr><th>Descriptive type</th><th>Word limit</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>Short Answer</td><td>50 words</td><td>5 out of 8</td><td>5 x 2 = 10</td></tr><tr><td>Short Essay</td><td>150 words</td><td>4 out of 7</td><td>4 x 5 = 20</td></tr><tr><td>Essays</td><td>450 words</td><td>2 out of 4</td><td>2 x 15 = 30</td></tr><tr><td>MCQ</td><td>NA</td><td>10</td><td>10 x 1 = 10</td></tr><tr><td colspan="3">Total</td><td>70</td></tr></table>				Descriptive type	Word limit	Number of questions to be answered	Marks	Short Answer	50 words	5 out of 8	5 x 2 = 10	Short Essay	150 words	4 out of 7	4 x 5 = 20	Essays	450 words	2 out of 4	2 x 15 = 30	MCQ	NA	10	10 x 1 = 10	Total			70
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## References:

1. Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). *Institutions as a fundamental cause of long-run growth*. In P. Aghion & S. N. Durlauf (Eds.), *Handbook of Economic Growth* (Vol. 1, pp. 385-472). Elsevier.
2. Eggertsson, T. (1996). *The old theory of economic policy and the new institutionalism*. *World Development*, 24(1), 1-19.
3. North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.
4. Williamson, O. E. (2000). *The new institutional economics: Taking stock, looking ahead*. *Journal of Economic Literature*, 38(3), 595-613.

## Suggested Readings:

1. Coase, R. H. (1937). *The nature of the firm*. *Economica*, 4(16), 386-405.
2. Rodrik, D. (2000). *Institutions for high-quality growth: What they are and how to acquire them*. *Studies in Comparative International Development*, 35(3), 3-31.
3. Greif, A. (2006). *Institutions and the path to the modern economy: Lessons from medieval trade*. Cambridge University Press.
4. Hodgson, G. M. (2006). *What are institutions?* *Journal of Economic Issues*, 40(1), 1-25.
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6. McCormick: Part I, Chapter 1. "Instincts," Chapter 2. "Institutions"
7. Veblen, "Why is Economics Not an Evolutionary Science [1898] (google site) This 1898 article in the QJE opened up inquiry and defined the field of Evolutionary Economics.
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- Economic Issues*, vol. 22, no. 1 (March, 1988): 79-111.
11. *Gunnar Myrdal's Institutional Perspective*, 5 *The Academic Personnel*
  12. Myrdal, Rich Lands and Poor: The Road to World Prosperity. New York: Harper and Row, 1957. Easterly, William, *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics* MIT Press, 2002. RESERVE
  13. Stiglitz, Joseph *Globalization and Its Discontents* W.W. Norton, 2003. RESERVE
  14. De Soto, Hernando, *Mystery of Capital: Why Capitalism Succeeds in the West and Fails Everywhere Else* Basic Books, 2003. RESERVE



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<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Business Economics</b>					
<b>Type of Course</b>	<b>DSE</b>					
<b>Course Code</b>	UC5DSEECO306					
<b>Course Level</b>	<b>300 - 399</b>					
<b>Course Summary</b>	<p>This course on Business Economics helps the students to comprehend the concepts of Economics to aid managerial decision making. The course equips students to apply demand forecasting techniques in various market conditions, delineate the features of production and cost curves in the short-term and long-term perspective and decipher pricing strategies and various profit types and theories in small and large organisations.</p>					
<b>Semester</b>	5	Credits			4	Total Hours
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practicum</b>	<b>Others</b>	
		4				60
<b>Pre-requisites, if any</b>						

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
1	Examine the importance of Economics in Business Decisions.	An	2, 1
2	Analyze the Demand elasticity and forecasting techniques in varying market conditions.	An	9,10
3	Appraise the Production and Cost Curve in the Short Run and Long Run.	E	3, 6
4	Interpret pricing methods and profit theories in decision making.	E	5, 3
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transactions (Units)



Module	Units	Course Description	Hrs	CO No

1	<b>Introduction to Business Economics</b>			
	1.1	Scope and Methods of Business Economics	2	1
	1.2	Role in managerial decision making	1	
	1.3	Decision making theory and Theory of firms	3	
	1.4	Scarcity – Choice – Resource allocation	2	
	1.5	Fundamental concepts and principles - incremental principle, discounting principle, Time concept, opportunity cost principle and equi-marginal principle	2	
2	<b>Demand and Forecasting</b>			
	2.1	Demand and types	2	2
	2.2	Determinants of demand	1	
	2.3	Elasticity of Demand – Price, income, cross	3	
	2.4	Demand Forecasting	1	
	2.5	Types of Demand forecasting	2	
	2.6	Statistical Techniques of Demand Forecasting	3	
	2.7	Non – Statistical techniques of Demand Forecasting	3	
3	<b>Break-even Analysis</b>			
	3.1	Production function	2	3
		Short-run production function – Law of Variable Proportion	2	
		Long run production function – Law of returns to scale	2	
	3.2	Economies of Scale and Diseconomies	3	
	3.3	Cobb Douglas Production function	2	
	3.4	Cost Concept - short run and long-run cost	2	
	3.5	Classification of Cost – accounting cost and economic cost – actual cost and opportunity cost – explicit cost and implicit or imputed cost – out of pocket cost - book cost – direct and indirect cost – historical cost and replacement cost	3	
	3.6	Revenue concept	2	
	3.7	Break- even Analysis	2	
4	<b>Theories of Pricing and Profit</b>			

	4.1	Pricing and its importance	2	4
	4.2	Methods of Pricing – General and specific	3	
	4.3	Pricing a new product	2	
	4.4	Pricing over the life cycle of a product	2	
	4.5	Theory of Profit - risk bearing theory - market imperfection theory - innovation theory	3	
	4.6	Accounting profit and Economic profit	3	

<b>Practicum</b>	Conduct a comprehensive market analysis for an industry / product or conduct a field visit to firms /industries.	30
<b>5</b>	<b>Teacher Specific Module</b>	

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>o CD2 - Tutorials/Assignments</li><li>o CD3 - Class Seminars</li><li>o CD4 - Peer group Discussions</li></ul>										
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Class Tests</td><td>10</td></tr><tr><td>Assignments</td><td>5</td></tr><tr><td>Seminar/Viva</td><td>5</td></tr></table>			Particulars	Marks	Class Tests	10	Assignments	5	Seminar/Viva	5
Particulars	Marks										
Class Tests	10										
Assignments	5										
Seminar/Viva	5										

Project/Practicum/Quiz/Book Review/Fieldwork etc.	10
<b>Total</b>	<b>30</b>

<b>B. Semester End examination</b>			
Written Examination (MCQ 10 marks and Written Answers 60 marks)			

<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
Short Answer	50 words	5 out of 8	5 x 2 = 10
Short Essay	150 words	4 out of 7	4 x 5 = 20
Essays	450 words	2 out of 4	2 x 15 = 30
MCQ	NA	10	10 x 1 = 10
<b>Total</b>			<b>70</b>

### References

1. Dwivedi, D.N., *Managerial Economics*, Vikas Publishing House, New Delhi
2. Keat, Yong, & Banarjee, *Managerial Economics: Economic Tools for Today's Decision Makers* – Pearson.
3. Mote V.L., Paul Samuel, Gupta G.S., *Managerial Economics*, TMH New Delhi

### Suggested Readings

1. Gregory Mankiw, *Principles of Micro Economics*, South Western Cengage Learning
2. Gupta G.S., *Managerial Economics*, TMH New Delhi
3. Homas, Maurice, *Managerial Economics*, Tata McGraw Hill
4. Mehta P.L., *Managerial Economics Analysis, Problems and Cases*, Sultan Chand & Sons (ISBN 81-7014-386-1)
5. Pearson & Lewis, *Managerial Economics*, Prentice Hall, New Delhi
6. Pindyck, Rubinfeld, *Micro Economics*, Pearson



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<b>Programme</b>	<b>BA (Hons) Economics</b>				
<b>Course Name</b>	<b>Security Analysis and Portfolio Management</b>				
<b>Type of Course</b>	<b>SEC</b>				
<b>Course Code</b>	<b>UC5SECECO300</b>				
<b>Course Level</b>	<b>300-399</b>				
<b>Course Summary</b>	This course provides an introduction to the principles and practices of security analysis and portfolio management. Students will learn to analyse different investment alternatives, including stocks, bonds, mutual funds, and real estate. They will also learn to develop and manage investment portfolios that meet the risk and return objectives of their clients.				
<b>Semester</b>	<b>5</b>	<b>Credits</b>			<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical</b>	<b>Others</b>
		<b>3</b>			
					<b>45</b>
<b>Pre-requisites, if any</b>					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Understand the concepts of Indian financial system, financial markets, financial instruments, and basic calculations.	U	1
2	Apply financial planning and risk management techniques to develop personalized financial plans.	A, An, S	2
3	Understand the working of the bond market.	U	2, 3, 4
4	Examine the process of financial benchmarking.	E	1, 2, 10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>		<b>Introduction to Financial Markets and Instruments</b>	<b>14</b>	
	1.1	Overview of the Indian Financial System-Structure-Capital Market-Primary and Secondary Market-Instruments.	3	1
	1.2	Indian stock market-NSE-BSE-GIFT-indices-calculations.	3	1
	1.3	Economic Linkages – Macroeconomic activities and security markets-the Cyclical Indicator Approach, Monetary Variables and Securities Market.	5	1
	1.4	Basic Financial Calculations: Risk and Return, Discounted Cash Flow Analysis.	4	1
<b>2</b>		<b>Security Analysis and Portfolio Management</b>	<b>15</b>	

	2.1	Fundamental Analysis: Economic Factors, Industry Analysis, Company Analysis.	3	2
	2.2	Technical Analysis: Assumptions-advantages-Types of Charts-Technical Trading Rules and Indicators-Dow theory.	4	2
	2.3	Portfolio Management: Specification of Investment Objectives and Constraints-Selection of Asset Mix-Formulation of Portfolio Strategy-Selection of Securities-Portfolio Execution-Portfolio Revision- Markowitz Model.	5	2
	2.4	Index Portfolio Construction techniques, Value versus Growth Investing-Random Walk Model.	3	2
<b>3</b>		<b>Bonds and Financial Benchmarking</b>	<b>15</b>	
	3.1	Bond Fundamentals, Bond Pricing- Bond Yield-Market interest rate and bonds-types of bonds-Bond market in India.	5	3
	3.2	Capital Assets Pricing Model-Arbitrage Pricing Theory-Sharpe's Single Index Model.	4	3
	3.3	Interest rate determination-External Benchmark Lending Rate-Base Rate.	3	4
	3.4	Financial Benchmarking-Financial Benchmarking in India-FBIL.	3	4
<b>5</b>	<b>5.1</b>	<b>. Teacher specific Module</b>		

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"> <li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li> <li>o CD2 - Tutorials/Assignments</li> <li>o CD3 - Class Seminars</li> <li>o CD4 - Peer group Discussions</li> </ul>												
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table border="1"> <thead> <tr> <th>Particulars</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>Class Tests</td><td>15</td></tr> <tr> <td>Assignments</td><td>5</td></tr> <tr> <td>Seminar/Viva</td><td>5</td></tr> <tr> <td>Project/Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr> <tr> <td><b>Total</b></td><td><b>30</b></td></tr> </tbody> </table>	Particulars	Marks	Class Tests	15	Assignments	5	Seminar/Viva	5	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	<b>Total</b>	<b>30</b>
Particulars	Marks												
Class Tests	15												
Assignments	5												
Seminar/Viva	5												
Project/Practicum/Quiz/Book Review/Fieldwork etc.	5												
<b>Total</b>	<b>30</b>												

	<b>B. Semester End examination</b> Written Examination (MCQ 10 marks and Written Answers 60 marks)			
	<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	4 out of 7	4 x 5 = 20

	Essays	450 words	2 out of 4	2 x 15 = 30
	MCQ	NA	10	10 x 1 = 10
	<b>Total</b>			<b>70</b>

### **Practicum /Practical Applications/ Case Studies**

1. Trading Simulation- create a portfolio with a fixed initial investment and analyse the performance
2. Real-world Applications: Analyzing Investment Scenarios, Case Studies, Investment Advice
3. Financial Modelling and Tools: Applying Financial Models, Software Simulation
4. Client Simulation and Role-playing: Mock Financial Planning Sessions, Feedback

### **References:**

1. Security Analysis and Portfolio Management -Donald E Fischer & Ronald J Jordan
2. Investment Analysis and Portfolio Management -Prasanna Chandra
3. Investments- Zvi Bodie, Alex Kane, Alan J Marcus, Pitabas Mohanty
4. Business Communication -R C Bhatia
5. Essentials of Business Communication-Rajendra Pal and J S Korlahalli

<p>Est. in 1921</p> 	<h1>UNION CHRISTIAN COLLEGE, ALUVA</h1>
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<b>Programme</b>	<b>BA (Hons) Economics</b>				
<b>Course Name</b>	<b>Economics of Rural Entrepreneurship</b>				
<b>Type of Course</b>	<b>SEC</b>				
<b>Course Code</b>	<b>UC5SECECO301</b>				
<b>Course Level</b>	<b>300-399</b>				
<b>Course Summary</b>	<p>This course provides a positive insight for students towards Rural Entrepreneurship and the ample opportunities it provides for the students to contribute towards the economic growth of the Nation. It aims to convert the dynamic Indian rural entrepreneurship as the haven for wealth creation. Rural entrepreneurship is considered to be a panacea to significant rural dilemmas like employment, impoverishment, and migration. Entrepreneurship is a prudent approach in favor of livelihood opportunities in rural areas while improving overall income levels. So rural entrepreneurship must be seen as a move toward national development. Moreover, rural start-ups are capable of providing the route to woman empowerment from her disenchantment.</p>				
<b>Semester</b>	<b>5</b>	<b>Credits</b>			<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	
		<b>3</b>			<b>45</b>
<b>Pre-requisites, if any</b>					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Understand the basic concepts of rural entrepreneurship.	U	1,2,3,10
2	Critically examine the major theories of entrepreneurship.	A	1,2
3	Design a detailed project proposal to start a rural enterprise.	C	1,2,10
4	conduct market survey and formulate marketing strategies.	C	1,2
5	explore the rural entrepreneurship opportunities in both farm and non-farm sector.	E	7,10
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

## COURSE CONTENT

### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
1	<b>Entrepreneurship - concepts and Theories</b>		11	
	1.1	Concepts: Entrepreneurship- entrepreneur- Importance of Entrepreneurship – Evolution of entrepreneurship in rural India-Types of rural entrepreneurship- Qualities and functions of an entrepreneur— Factors, Problems and Challenges of Rural Entrepreneurship	4	1
	1.2	Entrepreneurial competencies - entrepreneurial motivating factors-Women entrepreneurship- Ecopreneurship - rural micro enterprises	3	1
	1.3	Theories of Entrepreneurship: Innovation Entrepreneurship theory - Economic Entrepreneurship theory- Sociological Entrepreneurship theory- Psychological Entrepreneurship theory.	4	2

<b>2</b>	<b>Rural Entrepreneurial Ecosystem, Business Planning and Agribusiness</b>		<b>13</b>	
	2.1	Institutional Support for Rural Entrepreneurship - Special Role of NABARD in promoting and supporting the Rural Entrepreneurship - Government Schemes for promotion of Rural Entrepreneurship (central, state and district level schemes)– Rules and Procedures to start a Rural Entrepreneurship Firm. Procedures to obtain formal loans from banks and other institutions - Preparation of Detailed Project Report for Loan	7	2
	2.2	Agribusiness and Value Addition: Procuring – Processing- Storing- Marketing of Rural Products: Market Survey, Marketing Strategies-Branding- Labelling of products - concepts only (FASSI, ISI, ISO, FAO), Planning and Promotion, Digital and Social Media Marketing	6	2
<b>Practicum</b>	1. Preparation of Detailed Project Report for Loan 2. Conduct a market survey of a product( <b>Internal Assessment only</b> )		6 8	3
<b>3</b>	<b>Rural Entrepreneurship Opportunities</b>		<b>6</b>	
	3.1	New Entrepreneurship Opportunities in Farm sector: Organic Farm Products, Horticultural Products, Forest Produce, Medicinal Plant Products	3	3
	3.2	Entrepreneurship Opportunities in Rural Non -farm sector: Poultry, Aquaculture, Sericulture, Honeybee, Mushroom Cultivation, Handicrafts.	3	4
<b>Practicum</b>	1. Two different types of Case Studies related to Rural Entrepreneurship with local relevance (preferably one women entrepreneur) 2. Field visit		8 8	3
<b>4</b>	<b>Teacher Specific Module</b>			

<b>Teaching and Learning Approach</b>	<p><b>Classroom Procedure (Mode of transaction)</b></p> <p>Classroom Lectures: Traditional lectures can help the student to gain factual knowledge</p> <p>Participative learning and case studies: Encourage students to learning by experiencing the situation.</p> <p><b>Suggested Course Delivery Methods</b></p>
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	<ul style="list-style-type: none"><li>• CD1 – Lecture by chalk and boards/LCD projectors/ Projectors etc.</li><li>• CD2 - Tutorials/Assignments</li><li>• CD3 - Class Seminars</li><li>• CD4 – Case studies</li><li>• CD5 - Field visit</li></ul>																			
Assessment Types	<b>MODE OF ASSESSMENT</b> <b>Continuous Comprehensive Assessment (CCA) – 25 Marks</b> <table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Module Test - I</td><td>5</td></tr><tr><td>Module Test - II</td><td>5</td></tr><tr><td>Module Test - III</td><td>5</td></tr><tr><td>Seminar/Assignment</td><td>5</td></tr><tr><td>Project/Practicum/Quiz</td><td>5</td></tr><tr><td></td><td><b>25</b></td></tr></table>	Particulars	Marks	Module Test - I	5	Module Test - II	5	Module Test - III	5	Seminar/Assignment	5	Project/Practicum/Quiz	5		<b>25</b>					
	Particulars	Marks																		
	Module Test - I	5																		
	Module Test - II	5																		
	Module Test - III	5																		
	Seminar/Assignment	5																		
	Project/Practicum/Quiz	5																		
		<b>25</b>																		
	<b>Semester End examination</b> Written Examination (MCQ 5 marks and Written Answers 20 marks)																			
	<table><tr><th>Descriptive type</th><th>Word limit</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>Short Answer</td><td>50 words</td><td>4 out of 6</td><td>4 x 3 = 12</td></tr><tr><td>Short Essay</td><td>150 words</td><td>3 out of 6</td><td>3 x 6 = 18</td></tr><tr><td>Essays</td><td>300 words</td><td>2 out of 4</td><td>2 x 10 = 20</td></tr><tr><td colspan="3"><b>Total</b></td><td><b>50</b></td></tr></table>	Descriptive type	Word limit	Number of questions to be answered	Marks	Short Answer	50 words	4 out of 6	4 x 3 = 12	Short Essay	150 words	3 out of 6	3 x 6 = 18	Essays	300 words	2 out of 4	2 x 10 = 20	<b>Total</b>		
Descriptive type	Word limit	Number of questions to be answered	Marks																	
Short Answer	50 words	4 out of 6	4 x 3 = 12																	
Short Essay	150 words	3 out of 6	3 x 6 = 18																	
Essays	300 words	2 out of 4	2 x 10 = 20																	
<b>Total</b>			<b>50</b>																	

## References

1. Ajmeri, S. R. (2012). *Entrepreneurship Development*. New Delhi: Agrarian Land Press.
2. Charantimath, P. (2019). *Entrepreneurship Development and Small Business Enterprises* (3rd ed.). Pearson Education India.
3. Khanka, S. S. (2006). *Entrepreneurial Development*. S. Chand Publishing.
4. Sudhir Sharma, Singh Balraj, & Singhal Sandeep. (2005). *Entrepreneurship Development*. Wisdom Publications.
5. Drucker, P. F. (1999). *Innovation and entrepreneurship: Practice and*

- principles*. Butterworth-Heinemann. (Original work published 1985)
6. Gordona, E., & Natarajan, N. (2017). *Entrepreneurship Development*. Himalaya Publishing House Pvt Ltd.
  7. Ministry of Micro, Small and Medium Enterprises, Government of India. (2022). *Annual Report 2021-22*. Retrieved from <https://msme.gov.in/documents/reports-and-publications>


### **Suggested Readings**

1. MANAGE. (2013). *Agri-Business and Entrepreneurship Development, Course Material AEM-202*. Retrieved from <https://www.manage.gov.in/pgdaem/studymaterial/aem202.pdf>
2. Petrin, T. (1990). *The Potential of Entrepreneurship to Create Income and New Jobs for Rural Women and Families*. Paper presented at the Fifth Session of the FAO/ECA Working Party on Women and the Agricultural Family in Rural Development, Prague, 2-5 October



# SEMESTER 6



<div>Est. in 1921</div> 	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Indian Economy - I</b>					
<b>Type of Course</b>	DSC					
<b>Course Code</b>	<b>UC6DSCECO300</b>					
<b>Course Level</b>	<b>300-399</b>					
<b>Course Summary</b>	This course will enable the students to acquire subject knowledge & general awareness relating to the evolution and performance on all aspects of the Indian economy. It will also help them to acquire necessary skills to propose suitable policy solutions.					
<b>Semester</b>	5	Credits			4	Total Hours
<b>Course Details</b>	Learning Approach	Lecture	Tutorial	Practical	Others (Practicum)	
		3			2	75
<b>Pre- requisites, if any</b>	Foundation in basic economics.					

#### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, the learner will be able to	Learning Domains *	PO No
1	understand major developmental strategies, structural transformation & features of Indian economy.	U	1, 2, 10
2	develop knowledge regarding the demographic trends and the issues of Indian economy to global scenario.	A	2,3,4,5,7, 10
3	examine the performance and growth of various sectors of Indian economy.	An	1,2, 3, 7

4	evaluate critically the reasons behind the transformation of Kerala economy and the significance of Kerala Model in the development process of Kerala.	E	1, 2, 3, 6, 7, 10
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>		<b>Economic Development Strategy since Independence</b>	<b>20</b>	
	1.1	Indian Economy: Major features-India's Economic transition to one of the largest economies of the world-Progress of structural transformation including shift from Agriculture to Industry and Services.	3	1, 2
	1.2	Development strategy-Planning: objectives and strategy – Evaluation of Planning- NITI Aayog.	3	1, 2
	1.3	Economic reforms of 1991-New Industrial Policy of 1991- Structural Adjustment Programmes -LPG- Overview of reforms in other areas.	5	1, 2
	1.4	Population and economic development: Demographic features of India-Assessment of the India's demographic dividend phase-Human development scenario-Incidence of poverty-Inequality and unemployment in India.	4	1, 2
	<b>Practicum</b>	Practicum 1. Outline the major components of India's economic reforms. Practicum 2. Assess the prospects of demographic dividend in India.	5	4
<b>2</b>		<b>2. Sectoral developments</b>	<b>20</b>	
	2.1	India's industrial sector-trends -Recent Industrial Policy of India-Make in India and PLI-Industrial Corridor Project-Fourth Industrial Revolution and opportunities for India.	6	2, 3
	2.2	Agricultural sector: Green revolution -Current trends in production and productivity-Dominance of small and marginal farmers- Food security-Rise of India's service sector economy-Role of the IT sector.	5	2, 3

	2.3	RBI: Functions-Monetary policy instruments-RBI's Financial Regulation and Supervision-Banking sector reforms-Structure of India's banking sector.	4	2, 3
	Practicum	Practicum 1. Evaluate the success of the PLI scheme. Practicum 2. Assess the challenges posed by AI on India's IT sector.	5	3, 4
		3. External Sector and Fiscal Environment	20	
	3.1	Balance of payment crisis of 1991 and its management-India's trade composition and direction-Role of foreign capital in India's macroeconomic management- FDI and FPI-Current trends in India's balance of payments.	6	3, 4
	3.2	Fiscal policy in India: Tax structure and tax reforms including GST.	6	3, 4
	3.3	Indian federal finance: Finance Commission.	3	3, 4
	Practicum	Practicum 1. Outline the factors that caused India's BoP crisis in 1991. Practicum 2. Map the major tax revenues of the central government and the reform measures introduced.	5	3,4
		4. Kerala Economy	15	
	4.1.	Unique features of Kerala economy - Kerala model of development – Decentralized planning in Kerala.	5	3, 4
	4.2	Major development issues-Agriculture, Industry, Health and Education-Kerala's fiscal scenario- In migration and out migration	5	3, 4
	4.3	Role and significance of services sector in Kerala	2	3, 4
	Practicum	Students may analyse the growth and impact of the services sector on the state's economy.	3	3,4
<b>5</b>	<b>Teacher specific Module</b>			

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <b>Suggested Classroom Procedure (Mode of transaction)</b> <b>CD 1-Lecture-Based Instruction:</b> Conduct traditional lectures to introduce and explain the various issues related with Indian Economy. <b>CD 2-Discussion on the bases of current developments:</b> For Make in India, PLI, balance of payment development etc. group discussions can be adopted as a transaction mode.
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	<p><b>CD 3-Group discussions:</b> On topics such as poverty, inequality, and unemployment discussion on various dimensions of these issues can be made.</p> <p><b>CD 4 -. Assignments with the use of charts and mind mapping:</b> For areas like monetary policy instruments, banking sector regulation, banking structure, trade composition etc. chart-based assignments can be given.</p>
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<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b>			
	<b>Continuous Comprehensive Assessment (CCA) – 30 Marks</b>			
		<b>Particulars</b>	<b>Marks</b>	
		Assignment	10	
		Group Discussion	10	
		Report writing and presentation	10	
		<b>Total</b>	<b>30</b>	
	<b>Semester End examination</b>			
	Written Examination (MCQ 10 marks and Written Answers 60 marks)			
	<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	4 out of 7	4 x 5 = 20
	Essays	450 words	2 out of 4	2 x 15 = 30
	MCQ	NA	10	10 x 1 = 10
	<b>Total</b>			<b>70</b>


### Reference

1. Agarwal, A.N. and Agarwal, M.K.(2015), Indian Economy Problems of Development and Planning,S. Chand, New Delhi.
2. Ajay Chhibber, Salman Anees Soz, (2021) Unshackling India Hard Truths and Clear Choices for Economic Revival, Harper Collins.

3. B A Prakash (2009), The Indian Economy since 1991: Economic reforms and performance , Pearson Education.
4. Dhingra, I.C (2019), Indian Economy, S Chand and Sons Co Pvt. Ltd. New Delhi.
5. Gaurav Datt & Ashwani Mahajan ( recent Edition), Datt & Sundharam Indian Economy, S. Chand & Co., New Delhi
6. George K K (1993) Limits to Kerala Model of Developemnt, CDS, Trivandram
7. Meera Bai M. (ed) (2008), Kerala Economy, Serials Publication, New Delhi.
8. Misra and Puri (recent edition ), Indian Economy, Himalaya Publishing House, Mumabai.
9. Prakash B A (2004) Kerala's Economic Development, Sage Publications, New Delhi
10. Pulapre Balakrishnan (ed) ( 2011) Economic Reforms and Growth in India, Orient Black Swann.
11. Singh, N. (2017). Financial inclusion: Concepts, Issues and Policies for India
12. State Planning Board, Economics Review , Government of Kerala, Thiruvananthapuram (latest issue)
13. Sunil Mani et al. (ed) (2006), Kerala's Economy : Crouching Tiger, Sacred Cows, D C Books, Kottayam
14. Tyagi, B.P. (2017), Agricultural Economics and Rural Development, Jai Prakash Nath and Co., Meerut.
15. Uma Kapila, Indian Economy Performance & Politics (2023) by, Academic Foundation
16. Y V Reddy (2011) Global crisis, Recession and Uneven Recovery, Orient Black Swann





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<b>Programme</b>		<b>BA (Hons) Economics</b>					
<b>Course Name</b>		<b>Development Economics - I</b>					
<b>Type of Course</b>		<b>DSC - A</b>					
<b>Course Code</b>		UC6DSCECO301					
<b>Course Level</b>		<b>300 -399</b>					
<b>Course Summary</b>		This course explores the fundamental concepts of development, exploring their connections with the developmental experiences of nations. It emphasizes the application of development theories across various productive sectors and economies. The primary goal is to equip students with problem-solving, analytical, and critical thinking skills to investigate and propose evidence-based solutions for addressing pressing issues such as poverty, inequality, and migration within the context of promoting human development.					
<b>Semester</b>		6		<b>Credits</b>		4	<b>Total Hours</b>
<b>Course Details</b>		<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b> ( )	
			4				
<b>Pre-requisites, if any</b>							

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Describe the fundamental concepts of development and relate their connections with the development trajectory of nations.	K, U, A	7
2	Identify the application of development theories in different productive sectors and economies.	U, A	4,5
3	Develop problem solving, analytical skills and critical thinking to investigate and propose evidence-based solutions for addressing poverty, inequality, and migration in the context of promoting human development.	A, An, E,	1,2,8,6
4	Explore poverty, inequality, human capital's role, and demographic theories, evaluating the impact of crony capitalism on growth.	U, E, C	2,4, 5,6,10
5	Critically examine and analyse some key issues in economic development.	E, An, C	1,2,8,6, 10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction

Module	Units	Course description	Hrs	CO No.
1		<b>Introduction to Economics of Development</b>	<b>15</b>	
	1.1	Growth and development- meaning-distinction- Features of underdevelopment. Core values of development	<b>5</b>	<b>1</b>

	1.2	Indicators of Development (Income and Non-Income) PQLI, HDI, HPI, Gender Development index, Happiness Index, multi-Dimensional poverty index	<b>5</b>	<b>1</b>
	1.3	Amartya Sen's views on Development- as freedom – as Capability- as Entitlement (basic understanding ).	<b>5</b>	<b>1</b>
<b>2</b>	<b>Approaches to Development</b>		<b>17</b>	
	2.1	Classical theory of development (Ideas of Adam Smith and Ricardo only)	<b>3</b>	<b>2</b>
	2.2	Schumpeter's theory of innovation, Rostow's stages of growth, Dualism (social, financial & technological) Lewis's theory of unlimited supply of labour.	<b>8</b>	<b>2</b>
	2.3	Vicious circle of poverty - critical minimum effort thesis, big push theory, balanced and unbalanced growth theory.	<b>6</b>	<b>2</b>
<b>3.</b>	<b>Poverty, Inequality, and Human Capital in Development</b>		<b>13</b>	
	3.1	Poverty – absolute and relative – measurement- Inequality of income and wealth measures - Lorenz curve- Gini Coefficient- Growth versus inequality - Crony capitalism	<b>7</b>	<b>3</b>
	3.3	Role of Human Capital-education-health- in Economic development-concept of missing women-Optimum theory of population -Theory of demographic transition- demographic dividend-	<b>6</b>	<b>3</b>
<b>4</b>	<b>Leading Issues in Development</b>		<b>15</b>	
	4.1	Globalisation and development-Global Inequality.	<b>7</b>	<b>4</b>
	4.2	The rise of behavioural development economics Foundations of Behavioral Economics - Behavioral Biases and Development (concepts only)	<b>8</b>	<b>4</b>
<b>5</b>	<b>Teacher Specific Module</b>			


Teaching and Learning Approach	<b>Suggested Classroom Procedure (Mode of transaction)</b> <ul style="list-style-type: none"><li>• Lectures</li><li>• Organize field visits to development projects, NGOs, or relevant institutions to provide students with a practical understanding of inclusive development and the impact of migration</li><li>• Environmental Debates and Projects</li><li>• Policy Analysis Assignments/Seminar</li><li>• Student Research Projects</li></ul>																											
Assessment Types	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Class Tests</td><td>15</td></tr><tr><td>Assignments</td><td>5</td></tr><tr><td>Seminar/Viva</td><td>5</td></tr><tr><td>Project/Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr><tr><td><b>Total</b></td><td><b>30</b></td></tr></table>				Particulars	Marks	Class Tests	15	Assignments	5	Seminar/Viva	5	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	<b>Total</b>	<b>30</b>												
Particulars	Marks																											
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<b>Total</b>	<b>30</b>																											
	<b>B. Semester End examination</b> <b>Written Examination (MCQ 10 marks and Written Answers 60 marks)</b> <table><tr><th>Descriptive type</th><th>Word limit</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>Short Answer</td><td>50 words</td><td>5 out of 8</td><td>5 x 2 = 10</td></tr><tr><td>Short Essay</td><td>150 words</td><td>4 out of 7</td><td>4 x 5 = 20</td></tr><tr><td>Essays</td><td>450 words</td><td>2 out of 4</td><td>2 x 15 = 30</td></tr><tr><td>MCQ</td><td>NA</td><td>10</td><td>10 x 1 = 10</td></tr><tr><td colspan="3"><b>Total</b></td><td><b>70</b></td></tr></table>				Descriptive type	Word limit	Number of questions to be answered	Marks	Short Answer	50 words	5 out of 8	5 x 2 = 10	Short Essay	150 words	4 out of 7	4 x 5 = 20	Essays	450 words	2 out of 4	2 x 15 = 30	MCQ	NA	10	10 x 1 = 10	<b>Total</b>			<b>70</b>
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MCQ	NA	10	10 x 1 = 10																									
<b>Total</b>			<b>70</b>																									

## References

1. Higgins, B. (1968). *Economic Development*. Universal Book Stall, New Delhi.
2. Meier, G. M. (2007). *Leading Issues in Economic Development*. Oxford University Press, New Delhi.
3. Meier, G. M., & Rauch, J. E. (2014). *Leading Issues in Economic Development*. Oxford University Press, New Delhi.
4. Ray, D. (2008 & 2014). *Development Economics*. Oxford University Press, New Delhi.
5. Subrata Ghatak, (2008) *Introduction to Development Economics* (4<sup>th</sup> Edition) Routledge.
6. Taneja, M. L., & Myer, R. M. (2017). *Economics of Development and Planning*. Vishal Publishing Company, New Delhi.
7. Thirlwall, A. P. (2011). *Growth and Development with Special Reference to Developing Economies*. McMillian, New Delhi.
8. Thirlwall, A. P., & Penelope Pacheco- Lopez (2022). *Economics of Development*. Palgrave McMillian, New Delhi.
9. Todaro, M., & Smith, S. (2017). *Economic Development* (7<sup>th</sup> Edition). Pearson Education, New Delhi.

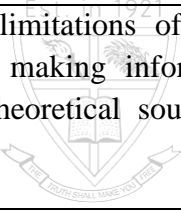
## Suggested Readings

1. Banerjee, Abhijit and Esther Duflo (2004). “Growth Theory through the Lens of Development Economics” (PDF).
2. Banerjee, Abhijit V., (2008). “Big Answers for Big Questions: The Presumption of Growth Policy.” Brookings Global Economy and Development.
3. Banerjee, Abhijit V., and Esther Duflo (2007). “The Economic Lives of the Poor.”
4. Caselli, Francesco (2005), “Accounting for Cross-Country Income Differences.” In Philippe Aghion & Steven Durlauf (ed.), *Handbook of Economic Growth*, edition 1, volume 1, chapter 9, pages 679-741.  
*Journal of Economic Perspectives*, 21(1): 141-168.
5. Mankiw, N. Gregory, David Romer, and David N. Weil (1992). “A Contribution to the Empirics of Economic Growth.” *The Quarterly Journal of Economics*, Vol. 107, No. 2, 407-437.

<div>Est. in 1921</div> 		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>		<b>BA (Hons) Economics</b>					
<b>Course Name</b>		<b>Econometrics - II</b>					
<b>Type of Course</b>		<b>DSE</b>					
<b>Course Code</b>		UC6DSEECO300					
<b>Course Level</b>		<b>300 - 399</b>					
<b>Course Summary</b>		This course in Econometrics is designed to equip students with a deeper understanding of advanced econometric techniques used in empirical economic analysis. Building upon foundational econometric concepts, this course focuses on complex models and methodologies to analyse real world economic data.					
<b>Semester</b>		6	Credits			4	Total Hours
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practicum</b>	<b>Others</b>		
		3	0	2	0	75	
<b>Pre-requisites, if any</b>	A basic knowledge of Econometrics and an access to lab and software facilities						

#### **COURSE OUTCOMES (CO)**

<b>CO No.</b>	<b>Expected Course Outcome</b>	<b>Learning Domains *</b>	<b>PO No</b>
1	understand and comprehend advanced econometric theories, models, and techniques employed in empirical economic analysis.	K,U	1, 3

2	apply advanced regression, time series, and panel data analysis techniques using statistical software proficiently.	A	1, 2
3	create and design empirical studies that utilize advanced econometric methods to investigate economic phenomena, formulate hypotheses, and draw meaningful conclusions from the analysis.	C	1,2, 10
4	appreciate the role of econometrics in unraveling complexities within economic systems, encouraging a lifelong pursuit of knowledge in the field.	Ap	1, 2
5	analyze economic datasets employing sophisticated econometric models to interpret complex relationships among variables, addressing issues like endogeneity, heteroscedasticity, and multicollinearity.	An	2, 10
6	develop technical skills in econometric analysis, enabling students to proficiently employ software tools and interpret results, fostering their ability to communicate complex econometric findings effectively.	S	1, 2, 10
7	evaluate the strengths and limitations of various econometric models and methodologies, making informed decisions about model selection based on theoretical soundness and empirical relevance.	E	1, 2
 <p><b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b></p>			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1	<b>Violation of the Assumptions of Classical Model and Some Extensions</b>		18	
	1.1	Heteroscedasticity, Auto-correlation, Multicollinearity: Nature, Consequences, Tests, and Remedial Measures	5	1, 2
	1.2	Model Specification and Errors: Consequences—Under fitting and Over fitting— Measurement Errors (Concepts Only )	4	1, 2

	1.3	Different Functional Forms of Regression Models and their Applications (Log-linear, Semi- log, Double log, Reciprocal and Log Reciprocal Models)—Choice of Functional Form	5	2, 3,5
	1.4	Nonparametric and Semiparametric Models (Concepts Only)	1	1,2, 3
	Practicum	Students may try to Specify Non Parametric and Semi Parametric models	3	
<b>2</b>	<b>Review of Multiple Regression Analysis</b>		<b>18</b>	
	2.1	Multiple Regression-Assumptions—General k variable Model—Variance Covariance Matrix	4	5, 1, 2
	2.2	Partial Regression Coefficients—Multiple Coefficient of Determination-R Square and Adjusted R Square	4	2, 3, 7
	2.3	Estimation and Testing of Hypothesis-Test of Coefficients and Overall Significance-t-test and F test-P-value—Testing the Equality of Two Regression Coefficients	5	1, 2, 7
	2.4	Restricted Least Squares-Testing Linear Equality Restrictions (Concepts Only)	2	4,5
	Practicum	Formulate Multiple Regression with data collected from local economy	3	
<b>3</b>	<b>Regression with Qualitative Variables and Simultaneous Equation Models</b>		<b>20</b>	
	3.1	Qualitative Explanatory Variables—Dummy Variable Regression—ANOVA and ANCOVA Models—Dummy variable Trap—Interpretation of Regression Results - Models with Qualitative Dependent Variables- LPM, Logit, Probit, and Tobit Models	4	1, 2, 4
	3.2	Interpretation of Regression Results -Simultaneous Equation Models—Simultaneous Equation Bias—Inconsistency of OLS Estimators—Identification Problem—Test of Simultaneity and Exogeneity	4	1, 2, 3, 4



	3.3	Problem of Estimation—Single Equation Methods — OLS—ILS— 2SLS and Systems Methods—2SLS and SURE Model—Lurking Variables (Concepts Only )	3	4, 3, 2
	3.4	Estimation of Distributed Lag Models—Koyck Model and its rationalization—Partial Adjustment and Adaptive Expectations Model—Almon Approach - Estimation of Auto Regressive Models—Instrumental Variables—Method of Instrumental Variables— Problems—SARG Test and Durbin h Statistic— Causality- The Granger Causality Test and Sims Test (Concepts Only )	4	1,4,5,6,7
	Practicum	Develop any of the above specified models	5	
<b>4</b>	<b>Panel Data Models</b>		<b>19</b>	
	4.1	Nature and Data Sources—Constant Coefficients Model— Error Components Models—Fixed Effect (Lest Squares Dummy Variable LSDV) Model—Fixed Effect (Within Groups WG) Estimator—Random Effects Model (REM)—REM and Hausman Test— Breusch-Pagan Test—Consistency Property of Estimators.	5	2, 3, 5, 6
	4.2	Dynamic Panel Data Analysis—Panel Data Unit Root— Cointegration Tests	5	2, 3, 5, 6,7
	4.3	Panel Data Estimation Techniques-Pooled OLS regression in panel data-Feasible Generalized Least Squares (FGLS)-Maximum Likelihood Estimation (MLE) in panel data models(Concepts Only)	5	2, 3, 5, 6,7
	Practical	Implement panel data analysis using statistical software (e.g., Stata, R, Python)/Analyzing real-world datasets employing fixed effects, random effects, and dynamic panel data models/Interpreting and presenting results from panel data estimations	4	
	5	Teacher Specific Module		

<p><b>Teaching Learning Approach</b></p>	<p><b>and</b></p> <p><b>Classroom Procedure (Mode of transaction)</b></p> <p>Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge</p> <p>Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions</p> <p><b>Suggested Course Delivery Methods</b></p> <ul style="list-style-type: none"> <li>o CD1 - Lecture by use of relevant software, LCD projector etc.</li> <li>o CD2 - Tutorials/Assignment</li> <li>o CD3 - Class Seminar</li> <li>o CD4 - Peer group Discussion</li> </ul>
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<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b>			
	<b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b>			
	<b>Particulars</b>			<b>Marks</b>
	Class Tests			10
	Assignments			5
	Seminar/Viva			5
	Project/Practicum/Quiz/Book Review/Fieldwork etc.			10
	<b>Total</b>			<b>30</b>
	<b>B. Semester End examination</b>			
	Written Examination (MCQ 10 marks and Written Answers 60 marks)			
	<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	4 out of 7	4 x 5 = 20
	Essays	450 words	2 out of 4	2 x 15 = 30
	MCQ	NA	10	10 x 1 = 10
	<b>Total</b>			<b>70</b>

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## References

1. Cramer, J. S., *Logit models from economics and other fields*, Cambridge University Press, 2003.
2. Damodar N. Gujarati, *Basic Econometrics*
3. Davidson, R., & MacKinnon, J. G., *Bootstrap methods and their application*, Cambridge University Press, 2006
4. Judge, G. G., Hill, R. C., Griffiths, W. E., Lütkepohl, H., & Lee, T. C. , *Introduction to the theory and practice of econometrics.*, John Wiley & Sons.omson, South Western,1988
5. Wooldridge, J. M., *Introductory Econometrics: A Modern Approach*, 2015

## Suggested Readings

1. Angrist, J. D., & Pischke, J. S., Mostly harmless econometrics: An empiricist's companion.*Princeton University Press*,2008.
2. Arellano, M., & Bover, O.,Another look at the instrumental variable estimation of error- components models. *Journal of Econometrics*, 68(1), 29-51.,1995
3. Cameron, A. C., & Trivedi, P. K., *Microeconometrics: Methods and Applications*, Cambridge University Press.,2010



<div>Est. in 1921</div> <div></div>		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>		<b>BA (Hons) Economics</b>					
<b>Course Name</b>		<b>Fundamentals of Fintech Entrepreneurship</b>					
<b>Type of Course</b>		<b>DSE</b>					
<b>Course Code</b>		<b>UG6DSEECO301</b>					
<b>Course Level</b>		<b>300-399</b>					
<b>Course Summary</b>		This course offers an overview of the fintech industry and the entrepreneurial ventures that are driving innovation within it. Core objective of the course is to provide students with a solid foundation in fintech concepts, technologies, and business strategies, preparing them to analyse the trends and forces that are conditioning fintech enterprises. The course is designed with a focus on startup dimensions of the dynamic and vibrant Indian fintech industry and hence the various fintech concepts, underlying technology and the regulatory issues involved are provided in the Indian context.					
<b>Semester</b>		6	Credits			4	Total Hours
<b>Course Details</b>	Learning Approach	Lecture	Tutorial	Practical/ Practicum	Others		
		3		2		75	
<b>Pre-requisites, if any</b>							

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, the learner will be able to:	Learning Domains *	PO No
1	Understand the various aspects related to the fintech sector in India.	U	1, 2, 3
2	Create an idea about the development of a fintech enterprise	C	1, 2, 3, 10
3	Apply the knowledge acquired here for the development of a fintech startup.	Ap	6. 7. 9. 10
4	Evaluate the prospects and challenges involved in fintech entrepreneurship.	E	5, 6, 10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1		<b>Overview of the Fintech Sector</b>	15	1
	1.1	Overview of financial technology (Fintech): Definition, evolution, and importance-Traditional versus digital finance-Trends and opportunities in Indian Fintech industry: Payments, lending, insurance, etc-Scenario of digital lending in India.	3	1, 3
	1.2	Digital Public Infrastructure (DPI) in India and its development role-India Stack-ONDC-RBI Innovation Hub.	4	

	1.3	Use of various technologies including AI in different areas of financial services like client onboarding, loan disbursement, recovery and customer interfaces-Robo advisors in wealth management services-DPI and other platforms that support fintechs: Aadhar verification, KYC norms-Video KYC, Payment infrastructure, CIBIL Score-CIBIL Microfinance score.	8	
	<b>Practicum</b>	1. Map out the various components of DPI in India and demonstrate how they helped and supported the birth and rapid proliferation of fintechs for financial institutions and the fintech firms. 2. Illustrate the operational aspects of CIBIL score.	10	
<b>2</b>		<b>India's Financial Services Industry -a Fintech angle Overview</b>	<b>15</b>	<b>1, 2, 3</b>
	2.1	Overview of the Indian financial services industry: Banks, NBFCs, MFIs, Payment banks and Small Finance Banks, Peer-to-Peer (P2P) Lending Platforms, Loan apps (risk and regulations), Crowdfunding-Account Aggregators.	7	
	2.2	Overview of the Fintech industry in India-Leading categories of fintech firms (payments firms, lending tech, insure tech, neo banks, fintech Saas etc.) - Banks adopting financial technologies- Complementarities and Competition between banks, NBFCs and fintech firms in the Indian context-Fintech firms as financial sector disruptors.	4	
	2.3	Design thinking for a fintech: Need for a user centric approach – Business model canvas and value proposition design-Revenue models: subscription, transaction fees etc-Survey of technological and digital tools for a fintech startup.	4	

	<b>Practicum</b>	1. Map the different types of fintech enterprises operating in India. 2. Explore and demonstrate the interdependence between banks, NBFCs and fintech firms in the Indian context. 3. Give ideation and provide a suitable business model for a potential fintech startup.	10	
<b>3</b>		<b>Electronic Money-Cryptocurrencies and Blockchain Technology</b>	<b>15</b>	<b>2, 3, 4</b>
	3.1	Electronic Money and Cryptocurrencies-CBDC-e-Rupee-Types of cryptocurrencies/assets-Difficulties in regulating cryptocurrencies-Global attempts to regulate crypto assets.	7	
	3.2	Crypto currencies: Currency vs asset nature-Risks of cryptocurrencies-Crypto Exchanges-Crypto crisis in the recent past-Case study of the fall of FTX.	8	
	3.3	Blockchain technology-Challenges and opportunities of blockchain technology-Applications of blockchain technology in the financial sector.	10	
	<b>Practicum</b>	Classify the different types of crypto assets. Compare and contrast crypto assets with CBDC.	5	
		Analyse the failure of FTX and the message it left to the financial regulators.		
<b>4</b>		<b>Regulatory landscape for fintech in India</b>	<b>15</b>	<b>1, 2, 3, 4</b>
	4.1	Regulatory Framework for Fintech industry: Need for regulation-Need for harmony between regulation and innovation-RBI approach to fintech regulation -Regulatory Sandboxes-Financial stability and the fintech sector.	4	
	4.2	Importance of Self-Regulatory Organisations (SRO) in fintech landscape-Fintech Repository.	5	
	4.3	Evolution of India's digital payment ecosystem-Components of India's Digital payment ecosystem -Role of NPCI-Uniqueness of UPI-Internationalisation of UPI-Comparison of UPI with other major digital payments systems across the world.	6	



	<b>Practicum</b>	Discuss the need for drawing a balance between regulation and innovation support of fintechs. Elaborate the unique advantages of UPI as a rockstar in the global fintech arena.	5											
5	<b>Teacher specific Module</b>													
<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <b>CD1-Lecture-Based Instruction:</b> Lecture classes on the various concepts and leading developments related with the FinTech sector. <b>CD2 - Case Studies:</b> Case study related various fintech developments including the crypto crisis, development of fintech startups India etc. <b>CD3-Group Discussions:</b> Disruption caused by fintechs to traditional banking and NBFC business. <b>CD4 - Interactive Workshops:</b> Use of emerging technologies for the development of fintech business. <b>CD5: Project discussion:</b> On the promotion of ideas, enterprise design and MVP for starting a fintech firm.													
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Assignment</td><td>10</td></tr><tr><td>Group Discussion</td><td>10</td></tr><tr><td>Report writing and presentation</td><td>10</td></tr><tr><td><b>Total</b></td><td><b>30</b></td></tr></table>				Particulars	Marks	Assignment	10	Group Discussion	10	Report writing and presentation	10	<b>Total</b>	<b>30</b>
Particulars	Marks													
Assignment	10													
Group Discussion	10													
Report writing and presentation	10													
<b>Total</b>	<b>30</b>													
	<b>B. Semester End examination</b> Written Examination (MCQ 10 marks and Written Answers 60 marks)													
	Short Answer	50 words	5 out of 8	5 x 2 = 10										
	Short Essay	150 words	4 out of 7	4 x 5 = 20										
	Essays	450 words	2 out of 4	2 x 15 = 30										

	MCQ	NA	10	10 x 1 = 10
	<b>Total</b>			<b>70</b>


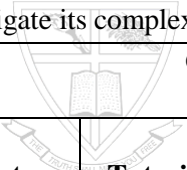
### **References**

1. The Fintech Entrepreneur's Guide, Ashok Mittal, 2022.
2. Fintech Future: The Digital DNA of Finance, Sanjay Phadke, Atlantic Publishers and Distributors (P) Ltd, 2023.
3. Digital Bank: Strategies To Launch Or Become A Digital Bank, Embassy Books, 2017.
4. Bitcoin and Cryptocurrency Technologies: 4 Books, Keizer Söze, Sabi Shepherd Ltd, 2019.
5. Financial Technology (FinTech) and Digital Banking in India, Jaspal Singh, New Century Publications 2022.
6. Private Equity Venture Capital in Financial and Fintech, October-December 2023, RBI innovation Hub, RBI.PRIVATE EQUITY-VENTURE CAPITAL IN FINANCIAL SERVICES & FINTECH



### **Suggested Readings**

1. FinTech Revolution in India: Opportunities and Challenges, CA Dr. Brajesh Kumar Jaiswal, Notion Press, February, 2024.
2. Reserve Bank Innovation Hub.<https://rbihub.in/>

<div>Est. in 1921</div> 	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>						
<b>Programme</b>	<b>BA (Hons) Economics</b>						
<b>Course Name</b>	<b>General Insurance</b>						
<b>Type of Course</b>	<b>DSE</b>						
<b>Course Code</b>	UC6DSEE CO302						
<b>Course Level</b>	300-399						
<b>Course Summary</b>	This course is designed to equip learners with a comprehensive understanding of the general insurance industry, preparing them for various roles within the sector and equipping them with the knowledge and skills needed to navigate its complexities effectively.						
<b>Semester</b>	6	 <b>Credits</b>				4	<b>Total Hours</b>
<b>Course Details</b>	Learning Approach	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/Practicum</b>	<b>Others</b>		
		3		2		75	
<b>Pre- requisites, if any</b>							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the learner will be able to:</i>	Learning Domains *	PO No
1	Understand the principles and concepts of general insurance, including risk management.	U	1
2	Applying insurance concepts to real-world situations and making informed decisions.	A	10
3	Evaluate the regulatory framework governing the general insurance industry and its implications for insurance companies and policyholders.	E	6

4	Analysing insurance policies and assessing their suitability for different risk scenarios	An	2
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

## COURSE CONTENT

### Content for Classroom transaction (Units)


Module	Units	Course Content	Hrs	CO No.
<b>1</b>		<b>Introduction to Risk Analysis</b>	<b>15</b>	
	1.1	Introduction to insurance- meaning- Importance.	4	1
	1.2	General Insurance: meaning- importance- Types- Overview of the insurance industry in India, Post - independence period –Insurance sector reforms- Malhotra committee 1994.	6	2
	1.3	General Insurance Corporation and other insurance institutions- Organizational structure of GIC-IRDA and its regulations.	4	3
	1.4	FDI in the insurance sector.	1	3
	Practicum: 1. Discussion on the relevance of insurance in society. 2. Discussion on the impact of FDI in insurance sector. Identifying GIC's significance and impact on general insurance industry. (Hours 7)			
<b>2</b>		<b>Insurance Operations and Management</b>	<b>15</b>	
	2.1	Principles of insurance- Insurance Marketing	4	1
	2.2	Claims management-Risk Management- Underwriting-Rating	5	2
	2.3	Customer Relationship Management- Reinsurance and other functions.	6	1
	Practicum	Claim processing simulation- Role-play as different stakeholders to negotiate and settle the claim Insurance policy Analysis (Hours 8)		
<b>3</b>		<b>Motor and health insurance</b>	<b>15</b>	
	3.1	Introduction to Motor Insurance-Basic Principles- Types of vehicles – Types of motor insurance policies	3	1

	3.2	Underwriting and Risk management-Claim settlement- Types of Claims-Various documents-Claim Procedures-Methods.	5	2
4	3.3	Legal and procedural aspects-Customer service and relationship management-Motor vehicles Act	2	2
	3.4	Health Insurance-Introduction - Growth of health insurance in India- principles-Types of health insurance-Underwriting and Risk Assessment	3	1
	3.5	Regulatory Framework-Insurance Act1938, IRDA Act1999 -Health insurance regulations- IRDA directions and guidelines on Health insurance.	2	3
	Practicum	Discussion on factors influencing underwriting decisions and the importance of risk assessment in setting insurance premiums. Group discussion on market dynamics, customer needs, and innovation in insurance products and services. (Hours 8)		
	<b>Rural, property and liability insurance</b>		<b>15</b>	
	4.1	Rural insurance- Types of products-Crop- Farmers package-Plantation insurance- Artisans-Livestock insurance- Hut insurance	5	1, 4
	4.2	IRDA Regulations on Rural Insurance, Reinsurance.	5	2
	4.3	Property insurance- meaning-Types- Features- Liability insurance-meaning- scope- Types-Rating- Legal aspects of Liability insurance	5	2
	Practicum: Discussion on the importance of liability coverage and types of policies available to mitigate the risk. Conduct a mini survey on crop insurance (Hours 7).			
	<b>Teacher specific Module</b>			
5	<b>Teaching and Learning Approach</b>			
	<b>Suggested Classroom Procedure (Mode of transaction)</b> <ul style="list-style-type: none"> <li>• <b>CD 1- Lecture-Based Instruction:</b></li> <li>• <b>CD 2 - Case Study Analysis:</b></li> <li>• <b>CD 3 - Group Discussions:</b></li> <li>• <b>CD 4 -. Interactive Workshops:</b></li> </ul>			

Assessment Types	MODE OF ASSESSMENT			
	MODE OF ASSESSMENT			
	A. Continuous Comprehensive Assessment (CCA) – 30 Marks			
	Particulars		Marks	
	Assignment		10	
	Mini Project		10	
	Report writing and presentation		10	
	Total		30	
	B. Semester end examination			
	Descriptive type		Word Limit	Number of questions to be answered
Short Answer		50 words	5 out of 8	5 x 2 = 10
Short Essay		150 words	4 out of 7	4 x 5 = 20
Essays		450 words	2 out of 4	2 x 15 = 30
MCQ		NA	10	10 x 1 = 10
Total				70

## References

1. Keller,G.(2014). *Statistics for Management and Economics.Cengage Learning*
2. McClave,J.T.,Benson, P.G., & Sincich,T.(2018). *Statistics for Business and Economics,Global Edition.*
3. Mendenhall, W., Beaver, B. M., & Beaver, R. J. (2019), *Introduction to probability and statistics.*
4. Moore, David S., et al.(2021), *The Basic Practice of Statistics.*

<div>Est. in 1921</div> <div></div>		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>		<b>BA (Hons) Economics</b>					
<b>Course Name</b>		<b>Behavioural Economics</b>					
<b>Type of Course</b>		<b>DSE</b>					
<b>Course Code</b>		<b>UC6DSEECO303</b>					
<b>Course Level</b>		<b>300-399</b>					
<b>Course Summary</b>		This course presents the principles of behavioural economics and their significance in economic decision-making, especially in situations involving risk, uncertainty, and strategic interactions. The focus is on elucidating economic decisions that diverge from the forecasts of neo-classical economics. The course endeavors to integrate perspectives from sociology, institutions, and evolutionary psychology to comprehend human behavior, providing guidelines for improved developmental outcomes. Additionally, it explores conventional research methods in the field, such as laboratory and field experiments, and examines their role in advancing the subject.					
<b>Semester</b>		<b>6</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>		<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical</b>	<b>Others</b>	
			3		2		
<b>Pre-requisites, if any</b>		<b>Knowledge of Microeconomic concepts</b>					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	compare and contrast behavioural and neoclassical concepts.	E	3
2	appraise behavioural concepts in individual decision making.	E	2
3	apply core behavioural concepts to predict behaviour of economic agents under risky situations.	E	2
4	analyse the mechanism of intertemporal choice and infer the reaction of economic agents during different time periods.	An	2
5	assess behavioural game theory concepts with the aim to explain observed human behaviour.	E	2
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1		<b>Foundations to Behavioural Economics</b>	<b>20</b>	
	1.1	Nature of Behavioural Economics- Perspective on Psychology and Economics- Role of Intuition, Emotions, Beliefs in decision making	5	1,2
	1.2	Origins of Behavioural Economics: Decision making under neoclassical approaches-Rationality Assumption and Economic Behaviour-Optimality- Bounded Rationality	4	1, 2
	1.3	Heuristics availability and biases, Representativeness, Substitution, Framing, Anchoring, Mental Accounting, Endowment bias, Status Quo bias	6	1, 2



	1.4	Nudge Theory- Choice Architect, Neuroeconomics	2	1,2
	Practicum	Develop a simple experiment (thought experiment or online survey) to explore how a specific factor (e.g., time pressure, social cues) might influence economic decision-making.	3	3
<b>2</b>	<b>Choice under Risk and Uncertainty</b>		<b>15</b>	
	2.1	Human Behaviour Under Uncertainty- Expected Utility as a basis for decision making	4	3
	2.2	Loss Aversion-Prospect Theory – Reference Points – Risk Concept and Understanding – Shape of Utility Function.	5	3
	2.3	Decision Weighting – Probabilistic Judgment	1	3
	Practicum	Develop an understanding on expected utility theorem	5	
<b>3</b>	<b>Intertemporal Choice, Temporal Choice</b>		<b>20</b>	
	3.1	Discounted Utility Model, Construal Level Theory	5	5
	3.2	Valuation of Delayed Consumption Preferences for Sequences of Outcomes	5	5
	3.3	Intertemporal Choice- Exponential discounting, Hyberbolic Discounting, Preference Reversal	5	5
	Practicum	Explore the concept of exponential discounting, a common assumption in the DU model. Discuss the discount rate, which reflects how much we value a reward the further it is in the future	5	
<b>4</b>	<b>Behavioural Game Theory</b>		<b>20</b>	
	4.1	Strategic Interaction and Social Norms: Ultimatum game	5	5
	4.2	Social Preferences Fairness, trust, cooperation, reciprocity, Norms	5	5
	4.3	Some applications of behavioural game theory; Modelling social preferences – inequality-aversion models, reciprocity models	5	5
	Practicum	Analyze the Ultimatum Game, a classic experiment testing fairness preferences.	5	
<b>5</b>	<b>Teacher specific Module</b>			

<b>Teaching and Learning Approach</b>	<p>Classroom Procedure (Mode of transaction)</p> <p>Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge</p> <p>Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions</p> <p>Suggested Course Delivery Methods</p> <ul style="list-style-type: none"> <li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li> <li>o CD2 - Tutorials/Assignments</li> <li>o CD3 - Class Seminars</li> <li>o CD4 - Peer group Discussions</li> </ul>												
<b>Assessment Types</b>	<p style="text-align: center;"><b>MODE OF ASSESSMENT</b></p> <p style="text-align: center;"><b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b></p> <table border="1" data-bbox="529 789 1357 1220"> <thead> <tr> <th>Particulars</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>Class Tests</td><td>15</td></tr> <tr> <td>Assignments</td><td>5</td></tr> <tr> <td>Seminar/Viva</td><td>5</td></tr> <tr> <td>Project/Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr> <tr> <td>Total</td><td>30</td></tr> </tbody> </table>	Particulars	Marks	Class Tests	15	Assignments	5	Seminar/Viva	5	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	Total	30
Particulars	Marks												
Class Tests	15												
Assignments	5												
Seminar/Viva	5												
Project/Practicum/Quiz/Book Review/Fieldwork etc.	5												
Total	30												

<p align="center"><b>B. Semester End examination</b></p> <p align="center"><b>Written Examination (MCQ 10 marks and Written Answers 60 marks)</b></p>			
<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
Short Answer	50 words	5 out of 8	5 x 2 = 10
Short Essay	150 words	4 out of 7	4 x 5 = 20
Essays	450 words	2 out of 4	2 x 15 = 30
MCQ	NA	10	10 x 1 = 10
<p align="center"><b>Total</b></p>			<b>70</b>


### References

1. Angner, Erik (2016), *A Course in Behavioral Economics*, Palgrave Macmillan
2. Nick Wilkinson; Matthias Klaes (2012), *An Introduction to Behavioral Economics*, 2nd Edition, Palgrave Macmillan.
3. Hal R. Varian (2014): *Intermediate Microeconomics with Calculus*, 1st Ed, W. W. Norton & Company.
4. Kahneman, Daniel and Tversky Amos (2000), *Choices, Values and Frames*, Cambridge University Press
5. Masao Ogaki, and Saori Tanaka (2014). *Behavioural Economics towards a New Economics by Integration with Traditional Economics*, Published by Springer, ISBN 978- 981- 10-6439-5
6. Kahneman, D (2011), *Thinking Fast and Slow*, Allen Lane, Penguin Books
7. E. Cartwright (2011), *Behavioural Economics* Routledge
8. Colin F. Camerer, George Loewenstein, Matthew Rabin (ed.) (2004), *Advances in Behavioral Economics*, Princeton University Press.
9. M. Altman (2007), *Handbook of Contemporary Behavioural Economics: Foundation and Developments* Prentice Hall India

10. Diamond Peter and Vartiainen (2007), Behavioral Economics and Its Applications, Princeton University Press.
11. Nick Wilkinson; Matthias Klaes(2012), An Introduction to Behavioral Economics, 2nd Edition, Palgrave Macmillan.
12. Colin F. Camerer(2004) George Loewenstein, Matthew Rabin (ed.)
13. Kahneman, Daniel and Tversky Amos (2000), *Choices, Values and Frames*, Cambridge University Press
14. Masao Ogaki, and SaoriTanaka(2017).*Behavioral Economics towards a New Economics by Integration with Traditional Economics*, Published by Springer, ISBN 978-981- 10- 6439-5
15. Kahneman, D (2011), *Thinking Fast and Slow*, Allen Lane, Penguin Books
16. Colin F. Camerer, George Loewenstein, Matthew Rabin (ed.)(2004), *Advances in Behavioral Economics*, Princeton University Press.
17. Nick Wilkinson; Matthias Klaes(2012), *An Introduction to Behavioural Economics*, 2nd Edition, Palgrave Macmillan. • Colin F. Camerer, George Loewenstein, Matthew Rabin (ed.)(2004)
18. Masao Ogaki, and SaoriTanaka(2017).*Behavioural Economics towards a New Economics by Integration with Traditional Economics*, Published by Springer, ISBN 978-981- 10- 6439-5
19. Colin F. Camerer, George Loewenstein, Matthew Rabin (ed.)(2004), *Advances in Behavioural Economics*, Princeton University Press.
20. G. Loewenstein (2007), *Exotic Preferences: Behavioural Economics and Human Motivation*, Oxford University Press
21. Dharni, Sanjit (2016), *The Foundations of Behavioural Economic Analysis*, Oxford University Press.
22. Hal R. Varian (2014): *Intermediate Microeconomics with Calculus*, 1st Ed, W. W. Norton & Company.
23. Colin F. Camerer, George Loewenstein, Matthew Rabin (ed.)(2004), *Advances in Behavioural Economics*, Princeton University Press.

### **Suggested Readings**

1. Pindyck, Robert S., Rubinfeld, Daniel L.. (2013). *Microeconomics 8th ed.* (8th). New Jersey: Pearson.
2. Koutsoyiannis, A. (1979): *Modern Microeconomics*, 2nd ed., Macmillan Press

<div>Est. in 1921</div> 		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>		BA (Hons) Economics					
<b>Course Name</b>		<b>Economics of Management and Organisational Behaviour</b>					
<b>Type of Course</b>		DSE					
<b>Course Code</b>		UC6DSEECO304					
<b>Course Level</b>		300 - 399					
<b>Course Summary</b>		Nature of Management, Management Functions, Approaches of Organisational Behaviour, Dynamics of Organisational Behaviour.					
<b>Semester</b>		6	Credits			4	Total Hours
<b>Course Details</b>		<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical</b>	<b>Others</b>	
			3		2		
<b>Pre-requisites, if any</b>							

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Introduction to Management and Organisational Behaviour</b>		<b>15</b>	
	1.1	Introduction to Management – Evolution – Concept – Scope – Significance – Role –Nature–Purpose	3	1
	1.2	Management as profession- Management and Administration – Functions of Management	3	2
	1.3	Management Thought – Classical Schools - Neo Classical - Quantitative and system school -Contingency approach to management - Decision theory school	4	2
	Practicum	Research the evolution of management thought. Create a timeline highlighting key milestones from early practices to modern management philosophies. Identify prominent figures associated with different eras of management (e.g., Frederick Taylor, Henri Fayol).	5	
<b>2</b>	<b>Management Functions</b>		<b>20</b>	
	2.1	Planning: Nature, Types, Importance, Steps in Planning Process, Long range and Short- range Planning, Objectives, MBO, Premising, Decision Making, Strategies & Policies, Making Planning effective and Open System Approach to Planning.	4	2
	2.2	Organising: Span of Management, Graicuna’s Theory of Superior-subordinate Relationship, Factors influencing Span of Management, Wide versus Narrow Spans, Decentralisation of Authority, Principles of Delegation, Balancing between Centralisation & de-centralisation, Types of Organisation.	5	3
	2.3	Staffing: Nature & Significance, A brief knowledge of Recruitment, Selection, Training& Development, and Performance Appraisal.	3	1

	2.4	Directing: Nature, Concept of Leadership, Leadership Styles, Theories of Leadership, Charismatic Leadership Theory, Concept of Motivation, relevance of Communication.	5	2
	2.5	Controlling: Concept and Importance of Control, Control Process, Types of Control Mechanism, Management by Exceptions.	3	2
	Practicum	Analyze real-world case studies of organizations that have implemented successful management practices. Identify the specific management functions and approaches used in these cases. Discuss the positive outcomes achieved through effective management.	5	
<b>3</b>	<b>Organisational Behaviour - Approaches and its Structure</b>		<b>23</b>	
	3.1	Organisation Behaviour -Introduction, Historical Perspective, Approaches - Importance, Framework for Learning OB, Limitations of OB, Globalization and OB.	4	3



	3.2	Organisation Structure: Classification on the basis of Possession of Authority, Classification on the basis of grouping of activities, New Organisational Designs – Project, Matrix, Organic Structure & Mechanistic Structure, Challenge of Modern Organisation, Virtual Organisation.	6	3
	3.3	Motivation – Concept of Motivation - Motivational Theories of Maslow, Herzberg, David McClelland, and Porter and Lawler.	4	3
	3.4	Leadership – Theories of leadership – Leadership Styles – Leadership Skills – Women and Leadership – Leadership for the future.	3	4
	3.5	Group Dynamics & Motivation – Benefits of Groups – Types of Groups – Group Formation and Development.	3	4
	Practicum	Reflect on your own leadership style and identify areas for development. Consider taking a leadership style assessment tool (optional).	3	
<b>4</b>	<b>Dynamics of Organisational Behaviour</b>		<b>12</b>	
	4.1	Group – Nature – Stages- Properties – Group Decision making – Dynamics of informal Groups.	4	4
	4.2	Conflict – interpersonal – inter group – organisational.	2	4
	4.3	Culture and Change: Concept of Culture, Fundamentals of Culture, Fundamentals of Change.	4	4
	Practicum	Analyze a real-world case study of a group facing challenges (e.g., communication issues, conflict). Apply your understanding of group dynamics to propose solutions for improved group performance.	2	

## 5 Teacher Specific Module

### Teaching and Learning Approach

#### Classroom Procedure (Mode of transaction)

Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge

Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions

#### Suggested Course Delivery Methods

- o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.
- o CD2 - Tutorials/Assignments
- o CD3 - Class Seminars
- o CD4 - Peer group Discussions



Assessment Types	MODE OF ASSESSMENT			
	A. Continuous Comprehensive Assessment (CCA) – 30 Marks			
	Particulars	Marks		
	Class Tests	10		
	Assignments	5		
	Seminar/Viva	5		
	Quiz/Book Review etc.	10		
	Total	30		
Est. in 1921				
	B. Semester End examination			
	Written Examination (MCQ 10 marks and Written Answers 60 marks)			
	Descriptive type	Word limit	Number of questions to be answered	Marks
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	4 out of 7	4 x 5 = 20
	Essays	450 words	2 out of 4	2 x 15 = 30
	MCQ	NA	10	10 x 1 = 10
	Total			70


## References

1. Hersey, Paul, Kenneth H. Blanchard, Dewey E. Johnson, *Management of Organisational Behaviour – Utilising Human Resources*, Prentice Hall, New Delhi
2. Koonz Harold, Cyril O'Donnell and Heinz Weihrich, *Essentials of Management*, Tata McGraw-Hill, New Delhi
3. Luthans, Fred ,*Organisational Behaviour*, McGraw -Hill
4. Newstrom, John W. and Keith Davis, *Organisational Behaviour – Human Behaviour at Work*, Tata McGraw-Hill, New Delhi
5. Robbins, Stephen P, *Organisational Behaviour*, Prentice Hall, New Delhi
6. Robbins, Stephen P. and Mary Coulter, *Management*, Prentice Hall, New Delhi

## SUGGESTED READINGS

1. Sanjay Gupta, *Management Concepts and Organisational Behaviour*, SPBD Publication
2. Ricky Griffin, *Management Principles and Applications*, Cengage, New Delhi
3. Meenakshi Gupta, *Principles of Management*, PH Learning, New Delhi
4. Tripthi & Reddy, *Principles of Management*, Tata McGraw- Hill, New Delhi
5. Gupta C.B. & Mathur S, *Management Principles and Applications*, Scholar Tech Press, Delhi
6. Rao V.S.P *Management Principles and Applications*, Taxman Publications



	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>			
<b>Programme</b>	<b>BA (Hons) Economics</b>			
<b>Course Name</b>	<b>Economics of Artificial Intelligence</b>			
<b>Type of Course</b>	<b>DSE</b>			
<b>Course Code</b>	<b>UC6DSEECO305</b>			
<b>Course Level</b>	<b>400-499</b>			
<b>Course Summary</b>	<p>This course explores the transformative impact of artificial intelligence (AI) on the economy, offering students a comprehensive understanding of how AI technologies are reshaping various sectors. Through a blend of theoretical foundations and practical case studies, students will examine AI's influence on productivity, employment, market dynamics, and economic policies. The curriculum also touches the ethical considerations and economic challenges posed by rapid technological advancement, equipping students with a foundational level knowledge to evaluate AI's potential and risks. By the end of the course, students will be able to articulate informed perspectives on AI's role in future economic landscapes and its implications.</p>			
<b>Semester</b>	7	<b>Credits</b>		4

Course Details	Learning Approach	Lecture	Tutorial	Practical/Practicum	Others	Total Hours
		3		2		75
Pre-requisites, if any						


### COURSE OUTCOMES (CO)


CO No.	Expected Course Outcome <i>Upon completion of this course, the learner will be able to:</i>	Learning Domains *	PO No
1	Understand the role of AI in enhancing productivity in various sectors of the economy.	U	1, 3
2	Analyse the areas and sectors in which AI helps the various tasks to be completed.	A	4, 5
3	Understand the influence of AI in Economics and Finance.	U	9, 10
4	Evaluate the impact of AI on the labour market and the various macroeconomic effects it produces.	E	8, 9, 10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

#### Content for Classroom transaction (Units)

Module	Units	Course Content	Hrs	CO No.
1		Introduction to AI	15	
	1.1	The role of productivity expansion in economic development-Solow's residual and the concept of productivity-Technological progress and productivity expansion.	5	1, 4

	1.2	Basics of Artificial Intelligence – Artificial intelligence: meaning, nature and evolution-Development of neural networks- Turing Test-Advent of machine learning-Significance of large language models and GPT.	5	3, 4
	1.3	A glimpse on AI affiliated developments: Difference between AI, Machine learning and robotics-Difference between narrow AI, general AI and super-intelligent AI.	5	3
	<b>Practicum</b>	Discuss the cognitive aspects of AI that may displace labour or fulfil tasks in various sectors.  Elaborate how AI is supplementing to other technological sectors like chip design in brining an edge to technology driven economies.	9	
				
<b>2</b>		<b>Popular Applications of AI</b>	<b>15</b>	
	2.1	AI applications in industry: Automation and robotics, automated decision making, predictive analytics, supply chain optimization and quality control systems.	5	2, 3
	2.2	AI applications in business: Customer Relationship Management (CRM), Marketing automation, Business intelligence and Analytics and Human Resource Management.	5	2, 4

	2.3	AI in other sectors: Education: Adaptive and personalized e-learning- Governance: AI in public administration-Infrastructure including transportation and smart cities-Health: AI based Diagnosis-Consumer segment: Personal assistants and smart home devices.	5	3, 4
	Practicum	Examine the significance of AI based adaptive learning in elearning. Prepare a survey of AI tools that promotes digital learning. Discuss the significance of prompting in large language models.	9	
				
3		<b>Applications of AI in Economics and Finance</b>	15	
	3.1	Uses of AI in economics: Predictive modelling, forecasting, and behavioural economics- Use of natural language processing to analyse economic and financial data.	5	1, 2
	3.2	Use of AI in Sentiment Analysis/Behavioural Economics: Steps of sentiment analysis: Data collection, pre-processing, feature extraction, model training, sentiment classification and analysis and reporting.	5	1, 3
	3.3	AI in Finance: Algorithmic trading, fraud detection, credit scoring systems, financial advising and management.	5	3, 4

	Practicum	Make a survey of major algorithmic trading AI applications. Analyse how AI is helping financial entities in client acquisition, lead generations and service delivery.	7	
	<b>4</b>	<b>Economic implications of AI</b>	<b>15</b>	
	4.1	AI labour market implications – Implications of AI on the job market-AI as a task fulfilment technology-AI as a labour replacement technology-AI and skill bias-AI based startups.	5	1, 2
	4.2	AI regulation-GPAI-OECD and G20 initiatives- UNICRI Centre for AI and Robotics-ethical issues related with AI.	5	1, 3
	4.3	Economic implications of AI-AI and inequality-AI favours big tech companies-the Magnificent seven and their role in the development of AI-Big tech, AI and the power of network effects.	5	1, 4

		<b>Practicum</b>	Conduct a market study about AI based start-ups and applications that have tremendous labour displacement effects. Prepare a report on how the big techs are integrating their newly designed AI applications into their popular platforms like browser, cloud devices etc.	5	
			Assignment: Leading AI applications developed by the big tech and their task areas. Illustrate the network and other economies associated with these AI innovations.		
		<b>5</b>	<b>Teacher specific Module</b>		

	<p><b>Teaching and Learning Approach</b></p>	<p><b>Suggested Classroom Procedure (Mode of transaction)</b></p> <p>Artificial intelligence is a rapidly transforming area. Any syllabus that covers the impact of AI on any fields of life including economic and social should touch the basics of AI as well. Still, given the elementary nature of a rapidly evolving.</p> <p><b>CD 1- Lecture-Based Instruction:</b> The lecture format for explaining the progressing AI and its impact on the various aspects of Economy and Business.</p> <p><b>CD 2 - Case Study Analysis:</b> For the understanding of AI, updated content based on case study can be adopted. Here, case study of any large language model on work or task can be analysed.</p> <p><b>CD 3 - Group Discussions:</b> Promote group discussions on emerging topics and current developments related to AI and its economy effects.</p> <p><b>CD 4 -. Presentations based on leading articles:</b> the impact of AI will be covered by prominent articles and research works. Such academic and analytical works can be presented in the class to nudge updates on the topics.</p> <p><b>CD 5 -Mapping and Simulations:</b> The AI is producing new types of task fulfilments and new types of enterprises that exploits</p>



Assessment Types	MODE OF ASSESSMENT			
	MODE OF ASSESSMENT			
	A. Continuous Comprehensive Assessment (CCA) – 30 Marks			
	Particulars		Marks	
	Assignment		10	
	Mini Project		10	
	Report writing and presentation		10	
	Total		30	
	B. Semester end examination			
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Short Essay	150 words	4 out of 7	4 x 5 = 20	
Essays	450 words	2 out of 4	2 x 15 = 30	
MCQ	NA	10	10 x 1 = 10	
Total			70	
		technology driven business opportunities. Prepare mapping of such sub industrial and services sectors where AI is ambushing the traditional sectors.		


### References

1. The Economics of Artificial Intelligence: An Agenda, Ajay Agrawal, Joshua Gans, Avi Goldfarb, NEBER, 2019.
2. Mitchell, Melanie. Artificial Intelligence: A Guide for Thinking Humans. Farrar, Straus and Giroux, 2019.

3. Agrawal, Ajay, Gans, Joshua, and Goldfarb, Avi. *Prediction Machines: The Simple Economics of Artificial Intelligence*. Harvard Business Review Press, 2018.
4. Bootle, Roger. *The AI Economy: Work, Wealth and Welfare in the Robot Age*. Nicholas Brealey Publishing, 2019.
5. O'Neil, Cathy. *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. Crown, 2016.
6. Autor, David. "Why Are There Still So Many Jobs? The History and Future of Workplace Automation." *Journal of Economic Perspectives*, vol. 29, no. 3, Summer 2015, pp. 3-30.
7. Aghion, Philippe, Jones, Benjamin F., and Jones, Charles I. "Artificial Intelligence and Economic Growth." In *The Economics of Artificial Intelligence: An Agenda*, edited by Ajay Agrawal, Joshua Gans, and Avi Goldfarb, University of Chicago Press, 2019, pp. 237-282.
8. Cockburn, Iain, Henderson, Rebecca, and Stern, Scott. "The Impact of Artificial Intelligence on Innovation." NBER Working Paper No. 24449, National Bureau of Economic Research, March 2018.
9. McKinsey Global Institute. "Artificial Intelligence: The Next Digital Frontier?" McKinsey & Company, June 2017.
10. Bessen, James. "AI and Jobs: The role of demand." *Labour Economics*, vol. 70, April 2021, pp. 10197.
11. Future of Humanity Institute. "Governance of AI." Oxford University, accessed 2023. <https://www.fhi.ox.ac.uk/research/research-areas/artificial-intelligence/>
- 12.

### **Suggested Readings**

1. AI & Society - <https://link.springer.com/journal/146>
2. The Journal of Artificial Intelligence Research - <https://www.jair.org/>
3. The future of Life org [www.thefutureoflife.org](http://www.thefutureoflife.org)
4. The OECD AI Observatory: <https://oecd.ai/en/>

<div>Est. in 1921</div> 	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Integrated Skills for Applied Economics</b>					
<b>Type of Course</b>	<b>Skill Enhancement Course (SEC)</b>					
<b>Course Code</b>	UC6SECECO300					
<b>Course Level</b>	<b>300-399</b>					
<b>Course Summary</b>	The objective of the course is to equip participants with a comprehensive set of skills essential for navigating the dynamic landscape of economics and its practical applications. Overall, the students should acquire the skills needed in the industry and hence those related to the various economic disciplines are integrated in this course.					
<b>Semester</b>	6	Credits			3	Total Hours
<b>Course Details</b>	Learning Approach	Lecture	Tutorial		Others	

				Practical/ Practicum		
		3				45
<b>Pre-requisites, if any</b>						

### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the learner will be able to:</i>	<b>Learning Domains *</b>	<b>PO No</b>
1	understand the methods and approaches for the acquisition and development of economics specific skill development in the concerned areas.	U	1, 4,
2	develop the skills in jobs that demand an application of economics theories and logics.	C, S	10
3	Understand economic theories and matching them with industries needs and developing the skill and art of converting KNOWLEDGE in the economic domains to the PRACTICAL field.	A, S	1, 7
4	design a skill-oriented technique and experiment new tools like data analysis tools.	C, S	1
5	analyse economic issues by using statistical techniques.	An	10, 3
6	construct an affinity and mindset for launching startups through different process involved like idealisation, prototyping and MVP.	S, A	2, 10, 9, 5
7	develop specific skills to produce contents on economic and financial topics.	C	10, 7,
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>		<b>Skill formation in Economic Policy Analysis</b>	<b>15</b>	
1	1.1	Monetary Policy Interpretation: RBI's monetary policy interventions-Repo rate, LAF and other interventions.	3	1, 3
	1.2	RBI's regulation and supervision of the banking sector-financial stability. US Federal Reserve Monetary Policy and the interconnectedness.	2	1, 3
	1.3	Understanding the government budget through <i>Budget at a Glance</i> Table of the latest central government budget- Important receipts, expenditure and deficit entries and their economic importance.	5	1, 3
	1.4	Writing reports and policy briefs and analysis about: Economic indicators CPI, IIP, Sensex Nifty, exchange rate movements-economic events, financial sector developments-Use of Economics Terminologies.	5	1, 2, 4
	<p>Group discussion: RBI's Annual Monetary Policy Statement, MPC meeting outcome, and the current budget, RBI's liquidity interventions to stabilise the banking system.</p> <p>Case study: The PLI Scheme of the government and the development of the electronics and other manufacturing sectors.</p>			
<b>2</b>		<b>Digital Content creation and promotion using AI tools</b>	<b>15</b>	
	2.1	Simplicity and Clear Language in writing: a case study of the <i>Economist</i> and <i>Financial Times</i> -Writing for the digital media: making the content emotional and appealing-Use of AI platforms in economic journalism: practical solutions and ethical issues-Use of effective promoting under LLMs like GPT 4 (or the updated versions)-Use of AI applications in customising text, image and videos.	5	4, 7

	2.2	Role of AI applications in digital content making: Text to image and video generation-Image processing modification using adobe firefly, adobe express-AI in business and economics journalism and blogging-Ethical considerations while using AI to generate content.	4	5, 6
	2.3	AI and digital advertising-Ad targeting and personalisation-Google ads and meta ads-Predictive Analytics and Advertising Campaigns-Display ads, search ads and social media ads-Optimising ad spends-ad manager and ad analytics-case study of meta platform and google ad.	3	6, 5
	2.4	Instructional Design Techniques and skills for Economics: Storyboard and script making-integrating text, image audio and video for e-learning-Mind mapping for economic content (using Canva)-Role of gaming and interactive contents-Setting keywords and URL in digital content.	3	5, 6
	<p>Case studies: Compare the article styles of important economic magazines and newspapers: Financial Times and the Economist magazine.</p> <p>Design contents on Economics topics using an updated GPT version with effective prompts.</p> <p>Demonstrate an ad campaign using meta ad platform and analyse the ad outcome using its insights.</p> <p>Prepare an instruction design for an economics topics using mind mapping.</p> <p>Industry visit and project: Industry visit to a digital content creation or content promotion firm.</p>			
<b>3</b>		<b>Basic Skills in Research and Excel Based Data Analysis</b>	<b>15</b>	
3	3.1	Types of market research- Surveys-Questionnaires and forecasting.	1	5
	3.2	Important Excel Shortcuts-Use of Excel techniques for data analysis-Functions and Formulas.	6	2, 10
	3.3	Sorting, Cleaning and Filtering of Data-Performing T-tests, chi-square tests, and ANOVA using excel.	6	3, 5, 10
	3.4	Conducting Correlation and Regression analysis using Excel.	2	2, 10
	<p>Assignment: Perform an excel regression analysis using secondary data.</p> <p>Mini Project: Create a questionnaire, collect data and use any of the models to conduct market research.</p>			

4	Teacher specific Module	
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Teaching and Learning Approach	<p><b>Classroom Procedure (Mode of transaction)</b></p> <p><b>Suggested Classroom Procedure (Mode of transaction)</b></p> <p>The skill sets suggested in this course is highly dynamic and may undergo quick changes. Hence, updated presentation of the content is desirable.</p> <p><b>CD 1: Lecture-Based Instruction:</b> For most of the course contents, lecture- based instructions combined with real world demonstrations (for module 2) is desirable.</p> <p><b>CD 2: Lab oriented sessions:</b> Lab sessions are suitable to provide the data analysis skills and digital content creation skills to the students.</p> <p><b>CD 3: Skill Generation Exercises:</b> For those skill creation components, exercises can be given to the students.</p> <p><b>CD 4: Use of digital content for skill generation:</b> Students can be asked to prepare digital content on their own as a practical exercise (eg. Articles on finance).</p> <p><b>CD 5: Self learning:</b> Instructing students to a report on any particular economic or financial index.</p> <p><b>Case 6: Presentation of Budget:</b> For a better understanding of the budget (or monetary policy statement), a mock budget can be prepared and presented by the students.</p> <p><b>CD 7: Group Discussions/Debate:</b> Conduct group discussion/Debate to explore the different dimensions of the government's budgetary exercise.</p> <p><b>CD 8: Interactive Workshops:</b> Interactive workshops can be conducted on methods for data analysis or visualisation.</p> <p><b>CD 9: Mock Exercises:</b> A startup project should be ideated by the students at any of the government programme like the YIP.</p> <p><b>CD 10: Industry visit:</b> There can be an industry visit to a content creation or digital advertising firm.</p> <p><b>CD 11:</b> Create an ad campaign in the meta platform to experiment the process of content promotion.</p>
Assessment Types	<b>MODE OF ASSESSMENT</b>

	<b>MODE OF ASSESSMENT</b>			
	<b>A. Continuous Comprehensive Assessment (CCA)</b>			
	<b>(1) Formative Assessment (FA)</b>			
	<b>(2) Summative Assessment (SA)</b>			
	<b>Assessment type</b>	<b>Number</b>	<b>Marks for one assessment</b>	<b>Total Marks</b>
	Mini Project	1	10	10
	<b>Total SA</b>	<b>1</b>	<b>20</b>	<b>10</b>
	<b>Total Marks for CCA (1+2)</b>			<b>25</b>
	<b>B. Semester End Examination-Written Examination.</b>			
	<b>B. Semester End Examination-Written Examination.</b>			

	<b>Question type</b>	<b>Word limit</b>	<b>Choice</b>	<b>Total Marks</b>
	Short Answers	50 words	10 out of 15	10 x 1 = 10
	Short Essays	150 words	10 out of 15	10 x 4 = 40
	<b>Total Marks</b>			<b>50</b>



	<b>MODE OF ASSESSMENT</b>			
	<b>A. Continuous Comprehensive Assessment (CCA)</b>			
	<b>(3) Formative Assessment (FA)</b>			
	<b>Assessment type</b>	<b>Number</b>	<b>Marks for one assessment</b>	<b>Total Marks</b>
	Report writing and presentation after making an industry visit	1	5	10
	Lab Exercises	1	10	5
	<b>Total Marks</b>			<b>15</b>
	<b>(4) Summative Assessment (SA)</b>			
	<b>Assessment type</b>	<b>Number</b>	<b>Marks for one assessment</b>	<b>Total Marks</b>
Mini Project	1	10	10	
<b>Total SA</b>	<b>1</b>	<b>20</b>	<b>10</b>	
<b>Total Marks for CCA (1+2)</b>			<b>25</b>	
<b>B. Semester End Examination-Written Examination.</b>				
<b>B. Semester End Examination-Written Examination.</b>				
<b>Question type</b>	<b>Word limit</b>	<b>Choice</b>	<b>Total Marks</b>	
Short Answers	50 words	10 out of 15	10 x 1 = 10	
Short Essays	150 words	10 out of 15	10 x 4 = 40	
<b>Total Marks</b>			<b>50</b>	

## **References**


1. Before You Start Up, Pankaj Goyal, Fingerprint Publishing, 2017.
2. Zero to One, Peter Thiel, Blake Masters, Virgin Books, 2014.
3. Startup Idea to MVP in 12 Weeks, Naren Lokwani, Starup Success Series.
4. The \$100 Startup: Fire Your Boss, Do What You Love and Work Better To Live More, Chris Guillebeau, Pan, 2015.
5. Entrepreneurial Ecosystems for Tech Start-ups in India: Evolution, Structure and Role (De Gruyter Studies in Knowledge Management and Entrepreneurial Ecosystems Book 1), M H Bala Subrahmanya, De Gruyter, 2021.
6. Introduction to Business and Economic Journalism, Text Book of Journalism, Pandeli Pani, Friedrich Naumann Foundation for Freedom, 2017, [https://www.idem-institute.org/downloads/ introduction to business and economic journalism.pdf](https://www.idem-institute.org/downloads/introduction%20to%20business%20and%20economic%20journalism.pdf).
7. Business Journalism: How to Report on Business and Economics, Keith Hayes, 2014.
8. The Future of Business Journalism: Why It Matters for Wall Street and Main Street, Chris Roush, Georgetown University Press, 2022.
9. Interconnectedness and Contagion Analysis: A Practical Framework, Jana Bricco; TengTeng Xu, International Monetary Fund, 2019.
10. Monetary Policy in India: A Modern Macroeconomic Perspective, Chetan Ghate, Kenneth M Kletzer, Springer.
11. Fundamentals of Government Budgeting in India, SP Ganguly, Concept Publishing Company, New Delhi, 2000.
12. Various government budget documents: <https://www.indiabudget.gov.in/>.
13. Basic Computational Techniques for Data Analysis: An Exploration in MS Excel, D Narayana, Sharad Ranjan, Nupur Tyagi, RoutledgeFalmer, 2023.
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16. Taylor & Francis. (2019). Buying impulse triggered by digital media. [online] Available at: [https://www.tandfonline.com/ doi/abs/ 10.1080/ 02642069. 2013. 719887](https://www.tandfonline.com/doi/abs/10.1080/02642069.2013.719887)
17. The New Science of Customer Emotions A better way to drive growth and profitability, Scott Magids, Alan Zorfas, and Daniel Leemon, Harward Business Review, November 2015.
18. The Determinants of Impulsive Buying Behaviour in Electronic Commerce, Ying Wang, Jialing Pan, Yizhi Xu, Jianli Luo and Yongjiao Wu; MDPI, School of Business, Wenzhou University, Wenzhou 325035, China, June 2022.
19. SOLD OUT: Digital Strategies for Effective Lead Generation, Sorav Jain, Notion

- Press, November 2019.
20. Impulse Buying Behaviour and Post-Purchase Regret: An investigation on Emotion-Sensing Technology as a means to diminish the regret arising from retail therapy in sad consumers, Copenhagen Business School; Master's Thesis; Elisa Laderchi, Rob Gleasure, May 2021.

### **Suggested Readings**

1. Business Data Analysis using Excel, David Whigham, Oxford,
2. Advanced Data Analysis with Excel 2019, Manish Nigam, BPB Publishers, 2023.
3. Data Analysis using Excel and SQL, Godon S Linoff, Wiley, 2016.



	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
Programme	<b>BA (Hons) Economics</b>				
Course Name	<b>Foundations of Environmental, Social, and Governance (ESG)</b>				
Type of Course	<b>VAC</b>				
Course Code	UC6VACECO300				
Course Level	<b>300-399</b>				
<b>Course Summary</b>	<p>This course delves into the Environmental, Social, and Governance (ESG) framework, focusing on its three pillars. It explores the UN's Principles for Responsible Investment and examines ESG within the corporate sector, particularly its role under Corporate Social Responsibility. The module covers GRI-Business Responsibility Reporting and the Nine Principles of Business Responsibility and Sustainability Report. Additionally, it discusses ESG-related regulations in India. The second part of the course addresses economic instruments for climate change, including concessional finance, blended finance, and green bonds, along with fundamentals of carbon pricing. The third section explores ESG disclosures, emphasizing the importance and challenges, as well as the concept of circular economy and its 10Rs. The course concludes by examining the Sustainable Blue Economy and the climate change threats faced by India's coastal areas.</p>				
<b>Semester</b>	<b>6</b>	<b>Credits</b>			<b>3</b>
<b>Course Details</b>	Learning Approach	Lecture	Tutorial	Practical	Others
		<b>3</b>			
<b>Pre- requisites, if any</b>					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Analyse the concepts in ESG.	An	1,10
2	Apply climate change aspects in Finance.	A	1,10
3	Analyse the concepts associated with ESG.	An	1,10
4	Understand Climate Change and the risks emanating from it.	U	1, 2, 3
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hours	CO No.
1		<b>Basics of ESG</b>	15	
	1.1	The concept of Environmental, Social and Governance- Three Pillars of ESG	3	1
	1.2	UN's Principles for Responsible Investment (PRI)	3	1
	1.3	ESG and the corporate sector- ESG under Corporate Social Responsibility	3	1
	1.4	GRI (Global Reporting Initiative)-Business Responsibility Reporting-Business Responsibility and Sustainability Report and its Nine Principles	3	1
	1.5	ESG related Regulations in India.	3	1
2		<b>Climate Change Finance</b>	12	
	2.1	Economic instruments for Climate Change-Concessional Finance-Blended Finance-Green Bonds, Guarantees.	4	2

	2.2	Fundamentals of Carbon Pricing: Carbon Taxes, Carbon Markets, CBAM.	4	2
	2.3	Green Bond Policy in India.	4	2
<b>3</b>	<b>Leading issues in ESG &amp; Climate Change</b>		<b>18</b>	
	3.1	ESG Disclosures and its Importance- Greenwashing.	5	3
	3.2	Environment and Social Management Framework and Environmental and Social Impacts during Project Implementation and Post Project Operation.	5	3
	3.3	Concept of Circular Economy and the 10Rs.	5	3
	3.4	Sustainable Blue Economy - Climate Change Threat to India's Coastal Areas.	3	3
<b>4</b>	<b>Teacher specific Module</b>			

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Lecture, Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge, , Case study, Seminar presentation Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>• CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>• CD2 - Tutorials/Assignments</li><li>• CD3 - Class Seminars</li><li>• CD4 - Peer group Discussions</li></ul>								
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA)</b> <table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Class Tests</td><td>10</td></tr><tr><td>Assignments</td><td>5</td></tr><tr><td>Seminar/Viva</td><td>5</td></tr></table>	Particulars	Marks	Class Tests	10	Assignments	5	Seminar/Viva	5
Particulars	Marks								
Class Tests	10								
Assignments	5								
Seminar/Viva	5								

	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	
	<b>Total</b>	<b>25</b>	
<b>A. Semester End examination</b> Written Examination (MCQ 10 marks and Written Answers 60 marks)			
<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
Short Answer	50 words	5 out of 8	5 x 2 = 10
Short Essay	150 words	3 out of 6	3 x 5 = 15
Essays	450 words	1 out of 3	1 x 15 = 15
MCQ	NA	10	10 x 1 = 10
<b>Total</b>			<b>50</b>

#### References:

1. Environmental, Social and Governance Practices in India (ESG) Principles and Practice, The Institute of Companies Secretaries of India, Study Material.
2. Environment and Social Management Framework (ESMF), Multidisciplinary Education and Research Improvement in Technical Education, (MERITE), Department of Higher Education, Ministry of Education (MoE), Updated Draft, June 2022.
3. Environmental, Social and Governance, The Management Accountant, The Institute of Cost Accountants of India, March 2022.
4. Carbon Trading: Some Insights & Perspectives, Radha Purswani, ICFAI books, December 2012.
5. Circular Economy- (Re) Emerging Movement, Shalini Goyal Bhalla, Invincible Publishers, December 2020.
6. Green bonds: Mobilising the debt capital markets for a low-carbon transition, Policy Perspectives, OECD, 2016.

#### SUGGESTED READINGS:

1. ESG Essentials: A Guide for Principled Investors" by Paul Herman
2. Sustainable Development: Principles, Frameworks, and Case Studies" by Okechukwu Ukaga and Abiodun Alao
3. Climate Change: What Everyone Needs to Know by Joseph Romm


4. Circular Economy: A New Sustainability Paradigm?" by Walter R. Stahel:
5. Blue Economy Handbook" by Mark J. Spalding, Meryl Williams, and David C. McCauley





# SEMESTER -7



		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>		<b>BA (Hons) Economics</b>				
<b>Course Name</b>		<b>Microeconomics - II</b>				
<b>Type of Course</b>		DCC				
<b>Course Code</b>		UC7DCCECO400				
<b>Course Level</b>		<b>400 -499</b>				
<b>Course Summary</b>		<p>This course equips the learners to analyse consumer behavior with powerful tools like demand theory, unravel production mysteries through models like Cobb- Douglas, and navigate uncertainty with theories like the Neumann-Morgenstern Utility Index. Master pricing strategies and game theory tactics to understand competitive dynamics. Explore the concept of income distribution with theories from Ricardo to Kaldor, then critically evaluate welfare theories and apply them to contemporary issues like the Easterlin Paradox. This course equips learners with the analytical skills to understand the core principles of economic behavior and its impact on society.</p>				
<b>Semester</b>		7	<b>Credits</b>			<b>Total Hours</b>
<b>Course Details</b>			<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/Practicum</b>	<b>Others</b>
	<b>Learning Approach</b>	3	0	3		75
<b>Pre-requisites, if any</b>	Acquaintance with basic economics and elementary microeconomics					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Analyse real-world consumer behavior using practical demand theory.	An	1
2	Explore the link between inputs and outputs.	C	2
3	Evaluate how consumers make decisions with time limitations.	A	1,2
4	Analyze firm interactions and pricing strategies.	E	6
5	Comprehend how wealth is distributed in economies by examining key theories.	A	2,10
6	Appreciate contemporary issues and their policy implications	Ap	1,2, 9,10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transactions (Units)

Module	Units	Course description	Hrs	No.
1		<b>Advanced Techniques in Demand and Production Analysis</b>	<b>15</b>	
	1.1	Pragmatic Demand Theory- Constant Elasticity Demand Function	2	1
	1.2	Empirical Production Functions: Cobb-Douglas, Variable Elasticity of Substitution (VES)	2	2
	1.3	Homothetic Production Function- Dynamic Demand Functions: Nerlove, Houthakker, Taylor - Linear Expenditure System	3	2
	1.4	Dynamic Demand Functions: Nerlove, Houthakker, Taylor - Linear Expenditure System	3	4

	Practicum	<p>(Optional) Using real economic data (e.g., historical price and quantity data), estimate a demand function or production function using statistical software.</p> <p>Analyze the results and interpret the estimated parameters in the context of the chosen model.</p> <p>Define dynamic demand functions and how they incorporate past consumption or prices into current demand.</p> <p>Explore three prominent dynamic demand models: Nerlove Model Houthakker Model Taylor Demand Model</p>	5	
<b>2</b>		<b>Consumer Behavior in Uncertainty and Time</b>	<b>18</b>	
	2.1	Neumann-Morgenstern Utility Index Risk and Uncertainty in Consumer Decision Making- Kahneman and Tversky's Theory	5	4
	2.2	Inter-temporal Substitution effect- Choices Involving Time- Time Allocation model-Attributes model of Kevin Lancaster	3	4
	2.3	Bernoulli Hypothesis, Friedman and Savage hypothesis,	2	4
	2.4	Network Externalities and Behavioral Effects- Network Externalities: Bandwagon, Snob, and Veblen Effects Behavioral Aspects in Consumer Choices	3	3
	Practicum	<p>Explore the bandwagon effect, where consumers are more likely to adopt a product because many others already have.</p> <p>Analyze the snob effect, where consumers avoid products that become too mainstream, seeking exclusivity.</p> <p>: Understand the Veblen effect, where consumers are willing to pay more for a product simply because it's expensive and signals high status.</p>	5	
<b>3</b>		<b>Pricing Theories and Game Theory in Economics</b>	<b>22</b>	
	3.1	Full-Cost Pricing Theory: Andrews Version, Limitations, and Merits Rate of Return Pricing and its Evaluation	5	4
	3.2	Various Pricing Strategies: Marginal Cost Pricing, Target Pricing, etc Marginal Productivity Theory and Product Exhaustion Problem	5	2
	3.3	Macro Theories of Distribution: Ricardo, Marx, Kalecki, Kaldor	5	2
	3.4	Introduction to Game Theory in Price Determination	3	3


	Practicum	Identify and analyze the different types of costs incurred by a business fixed, variable, total, cost-plus, value-based, competition- based, marginal cost, target etc.. Calculate the break-even point, ,the minimum quantity that needs to be sold to cover all costs	4	
<b>4</b>		<b>Equilibrium, Welfare, and Social Choice</b>	<b>20</b>	
	4.1	Partial and General Equilibrium Analysis- Walrasian General Equilibrium System- Existence, Uniqueness and Stability of an Equilibrium-2x2x2	6	1
	4.2	Welfare Theories: Pigou, Pareto, Kaldor-Hicks, Bergson- Samuelson, Arrow	3	5
	4.3	Arrow's Impossibility Theorem and Sen's Capability Theory-Rawls' Theory of Justice, Nussbaum's Central Capabilities,	3	5
	4.4	Contemporary Issues and Case Studies - Easterlin Paradox and Human Happiness Index	3	5
	Practicum	Gain a deeper understanding of the Easterlin Paradox and its implications for happiness research. Develop a short survey to measure happiness and related factors (e.g., income satisfaction, social support, work-life balance) among your peers or colleagues. Analyze the results to identify potential correlations. Develop critical thinking skills by analyzing the limitations of economic explanations for happiness. Improve research skills by exploring case studies and national happiness data.	5	
<b>5</b>	<b>Teacher Specific Module</b>			

<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>o CD2 - Tutorials/Assignments</li><li>o CD3 - Class Seminars</li><li>o CD4 - Peer group Discussions</li></ul>																															
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Class Tests</td><td>15</td></tr><tr><td>Assignments</td><td>5</td></tr><tr><td>Seminar/Viva</td><td>5</td></tr><tr><td>Project/Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr><tr><td><b>Total</b></td><td><b>30</b></td></tr></table> <b>B. Semester End examination</b> Written Examination (MCQ 10 marks and Written Answers 60 marks) <table><tr><th>Descriptive type</th><th>Word limit</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>Short Answer</td><td>50 words</td><td>5 out of 8</td><td>5 x 2 = 10</td></tr></table> <table><tr><td>Short Essay</td><td>150 words</td><td>4 out of 7</td><td>4 x 5 = 20</td></tr><tr><td>Essays</td><td>450 words</td><td>2 out of 4</td><td>2 x 15 = 30</td></tr></table>				Particulars	Marks	Class Tests	15	Assignments	5	Seminar/Viva	5	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	<b>Total</b>	<b>30</b>	Descriptive type	Word limit	Number of questions to be answered	Marks	Short Answer	50 words	5 out of 8	5 x 2 = 10	Short Essay	150 words	4 out of 7	4 x 5 = 20	Essays	450 words	2 out of 4	2 x 15 = 30
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Essays	450 words	2 out of 4	2 x 15 = 30																													

	MCQ	NA	10	10 x 1 = 10
	<b>Total</b>			<b>70</b>

## Reference

1. Varian, Hal R. Microeconomic Analysis. W. W. Norton & Company, 2014.
2. Mas-Colell, Andreu, Michael D. Whinston, and Jerry R. Green. Microeconomic Theory. Oxford University Press, 1995.
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6. Carlton, Dennis W., and Jeffrey M. Perloff. Modern Industrial Organization (4th ed.). Addison Wesley, 2004.
7. Mas-Colell, Andreu, Michael D. Whinston, and Jerry R. Green. Microeconomic Theory (1st ed.). Oxford University Press, 1995.
8. Pindyck, Robert S., and Daniel L. Rubinfeld. Microeconomics (8th ed.). Pearson Education, 2012.
9. Rubinstein, Ariel. A Course in Game Theory (1st ed.). The MIT Press, 2006.
10. Carlton, Dennis W. The Economics of Industrial Organization (1st ed.). Prentice-Hall, 1983.
11. Böhm-Bawerk, Eugen von. Capital and Interest (1st ed.). Ludwig von Mises Institute, 2016.

<p>Est. in 1921</p> 	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>	<b>BA (Hons) Economics</b>				
<b>Course Name</b>	<b>Macroeconomics - II</b>				
<b>Type of Course</b>	<b>DCC</b>				
<b>Course Code</b>	UG7DCCECO401				
<b>Course Level</b>	<b>400-499</b>				
<b>Course Summary</b>	<p>The modern macroeconomics course enables students to acquire knowledge about different schools of economic thought after Keynes including different Keynesian groupings. This course emphatically captures the fundamental theoretical debates between Classical and Keynesian followers. Furthermore, it provides an opportunity for students to divulge upon the various debates surrounding policy interventions.</p>				
<b>Semester</b>	<b>7</b>	<b>Credits</b>			<b>4</b>  <b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical</b>	<b>Others</b>
		4			60
<b>Pre-requisites, if any</b>					



### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the students will be able to:</i>	<b>Learning Domains *</b>	<b>PO No</b>
<b>1</b>	explain the major disagreements between different Keynesian Followers.	E	1, 10
<b>2</b>	analyse the relevance of Monetarism as an effort towards a revival of Classical Macroeconomics.	An	1, 10
<b>3</b>	evaluate the role of the government as per the modern schools in the classical tradition.	An	1, 10
<b>4</b>	explain the theoretical contributions of the New Classical school and their strong critique on policy effectiveness.	E	1, 10
<b>5</b>	evaluate the New Keynesian attempts towards a comeback of Keynesian Economics.	E	1, 10
<b>6</b>	explain the practical difficulties suggested by New Keynesians with regard to wage/price flexibility as an equilibrating mechanism.	A	1, 10
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

### COURSE CONTENT

#### Content for Classroom transaction (Units)

<b>Module</b>	<b>Units</b>	<b>Course description</b>	<b>hrs</b>	<b>CO No.</b>
<b>1</b>		Keynesian Conflicts- Rigidity or Uncertainty	<b>0</b>	
	1.1	Hydraulic Keynesianism- IS-LM Model(with fiscal & monetary policy impacts) - Classical-Keynesian synthesis and eventual surrender to classics-The Pigou effect	6	O1
	1.2	Disequilibrium Keynesianism or Neo Keynesianism- Uncertainty, information and coordination difficulties as the main theme of Keynes- Rejection of the Walrasian auctioneer-Dual decision hypothesis of	8	1


		Robert Clower- Lack of market coordination hypothesis by Axel Leijonhufvud		
	1.3	Post Keynesian Economics- Essential Characteristics- Procedural rationality- Endogeneity of Money-Fiscal and Monetary policy in PKE	6	1
<b>2</b>		Classical Revival	0	
	2.1	Monetarism- Quantity theory restatement and the monetarist transmission mechanism- Monetarist view on interest rate- Expectations augmented Phillips Curve analysis with policy implications-Monetarist view regarding interest rates- Rule over discretion	7	3
	2.2	Supply side economics- Main propositions-Tax cut policy-Laffer curve analysis-Role of the government	3	3
<b>3</b>		Classical Assertion	5	
	3.1	New Classical Economics- The rational expectations hypothesis- Continuous market clearing- Policy ineffectiveness proposition by Robert Lucas [ Activity: Study the consumption behavior of the neighborhood]	8	4
	3.2	Real Business Cycle School- Real shocks instead of monetary shocks-Impulse and Propagation mechanisms-RBC Labour market model [ Activity: Analyze the investment trends and patterns of any industry]	7	4
		Keynesian Resurrection	5	
<b>4</b>	4.1	New Keynesian Economics- REH does not mean end of Keynesian economics- Micro foundations wage and price rigidity- Nominal wage rigidity model- Nominal price rigidity model(menu cost model)	7	, 6
	4.2	Real Rigidity models-Asymmetric Information-Implicit contract Model- Insider outsider model –Efficiency wage theories-Labour turnover, Fairness and Shirking models- Hysteresis effect	8	5 6
<b>5</b>		<b>Teacher specific Module</b>		

<b>Teaching and Learning Approach</b>	Classroom Procedure (Mode of transaction) Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions Suggested Course Delivery Methods <ul style="list-style-type: none"><li>• CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>• CD2 - Tutorials/Assignments</li><li>• CD3 - Class Seminars</li><li>• CD4 - Peer group Discussion</li></ul>															
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table><tr><td>Particulars</td><td>Marks</td></tr><tr><td>Class Tests</td><td>15</td></tr><tr><td>Assignments</td><td>5</td></tr><tr><td>Seminar/Viva</td><td>5</td></tr><tr><td>Project/Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr><tr><td>Total</td><td>30</td></tr></table>				Particulars	Marks	Class Tests	15	Assignments	5	Seminar/Viva	5	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	Total	30
Particulars	Marks															
Class Tests	15															
Assignments	5															
Seminar/Viva	5															
Project/Practicum/Quiz/Book Review/Fieldwork etc.	5															
Total	30															
	<b>B. Semester End examination</b> <b>Written Examination (MCQ 10 marks and Written Answers 60 marks)</b> <table><tr><td>Descriptive type</td><td>Word limit</td><td>Number of questions to be answered</td><td>Marks</td></tr><tr><td>Short Answer</td><td>50 words</td><td>5 out of 8</td><td>5 x 2 = 10</td></tr><tr><td>Short Essay</td><td>150 words</td><td>4 out of 7</td><td>4 x 5 = 20</td></tr></table>				Descriptive type	Word limit	Number of questions to be answered	Marks	Short Answer	50 words	5 out of 8	5 x 2 = 10	Short Essay	150 words	4 out of 7	4 x 5 = 20
Descriptive type	Word limit	Number of questions to be answered	Marks													
Short Answer	50 words	5 out of 8	5 x 2 = 10													
Short Essay	150 words	4 out of 7	4 x 5 = 20													

	Essays	450 words	2 out of 4	2 x 15 = 30
	MCQ	NA	10	10 x 1 = 10
	<b>Total</b>			70

### References:

1. Snowdon, Brian and Vane, Howard, R (2005): *Modern Macroeconomics: Its Origins, Development and Current State*, Edward Elgar.
2. Levacic, Rosalind and Rebmann, Alexander (1982): *Macroeconomics: An Introduction to Keynesian- Neo-Classical Controversies*, 2nd Ed, MacMillan
3. Chirichiello, Giuseppe (1994): *Macroeconomic Models and Controversies*, The Macmillan Press Ltd.
4. Agenor, Pierre-Richard and Montiel, Peter J. (2015): *Development Macroeconomics* 4th Ed, Princeton University Press, Princeton.
5. De Vroey, Michel (2016): *A History of Macroeconomics from Keynes to Lucas and Beyond*, CUP.
6. Harcourt, G. C. (2006): *The Structure of Post-Keynesian Economics: the Core Contributions of the Pioneers*, CUP. (Module-III-B)
7. Heijdra, Ben J. (2017): *Foundations of Modern Macroeconomics*, 3rd Ed, OUP

<div><div><div>Est. in 1921</div><div></div></div></div>	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Mathematical Economics - I</b>					
<b>Type of Course</b>	<b>DCC</b>					
<b>Course Code</b>	<b>UG7DCCECO402</b>					
<b>Course Level</b>	<b>300-399</b>					
<b>Course Summary</b>	The course focuses on fundamental principles of calculus and its relevance to the field of Economics. It aims to equip students with the necessary skills to understand mathematical modelling approaches, which may be utilised to address a range of economic situations and problems in order to derive solutions.					
<b>Semester</b>	<b>7</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learn ing Appr oach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	<b>Others</b>	
		<b>4</b>				
<b>Pre- requisites, if any</b>						

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Understand the concepts of partial differentiation, total derivative, and differential and homogeneity of a function.	U	2
2	Apply concepts of differential calculus in economics and utilize them for rigorous analysis.	An	1
3	Outline the rules of integration and use them to solve problems.	U	2
4	Apply integration techniques in economic analysis.	An	1
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom Transactions (Units) 921

Module	Units	Course description	Hrs	CO No.
1		<b>Calculus of multivariable functions</b>	15	
	1.1	Functions of several variables - partial derivatives, higher order partial derivatives - quasi convexity and quasi concavity.	3	1
	1.2	Optimization of multivariate functions, criteria, inflection and saddle points	3	1
	1.3	Constrained optimization with Lagrange multiplier	3	1
	1.4	Differentials: total and partial differentials	2	1
	1.5	Total derivatives - implicit and inverse function rules	2	1
	1.6	Homogeneous functions and non-homogeneous functions - Homothetic functions - Euler's theorem	2	1
2		<b>Basic applications of multivariable calculus in Economics</b>	18	

	2.1	Consumer behavior - Utility Function : - indifference curves – MRS – equi-marginal utility- Demand function- partial elasticities: - price, cross and income elasticities- commodity classification(normal, inferior, substitute and complementary, luxury and necessity)	5	2
	2.2	Producer behavior - Production Function – isoquants – MRTS - factor elasticities – elasticity of substitution - Returns to a factor -identifying stages of returns to a factor - Returns to	6	2



		scale and degree of homogeneity of homogeneity – problems, C D and CES production functions and their properties - Supply function		
	2.3	Consumers equilibrium and producers' equilibrium – ordinal analysis – problems - equilibrium in a multi-plant firm - equilibrium derivation and problems - Market equilibrium	4	2
	2.4	Optimising multivariable functions in economics – cost function – revenue function and profit function, functions subject to constraints – Meaning and significance of Lagrange multiplier in economics	3	2
<b>3</b>	<b>Integral Calculus</b>		<b>15</b>	
	3.1	Integration – meaning and significance for economics - indefinite integrals	2	3
	3.2	Rules of integration – constant function – power rule - exponential function rule	2	3
	3.3	Integration by substitution , integration by parts	4	3
	3.4	Definite integrals – fundamental theorem of calculus – Properties of definite integrals	3	3
	3.5	Area under a curve and between curves	2	3
	3.6	Multiple integrals(concept only)	2	3
<b>4</b>	<b>Basic applications of integral calculus in Economics</b>		<b>12</b>	
	4.1	Marginal functions to total function – utility, revenue, cost and investment functions	2	4
	4.2	Investment flow and discounting	2	4
	4.3	Present value of cash flow and perpetual flow	2	4
	4.4	Consumer's surplus and Producer's surplus, total welfare - dead weight loss of taxation	6	4
<b>5</b>	<b>Teacher Specific Module</b>			



<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>• CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>• CD2 - Tutorials/Assignments</li><li>• CD3 - Class Seminars</li><li>• CD4 - Peer group discussions</li></ul>															
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Class Tests</td><td>10</td></tr><tr><td>Assignments</td><td>10</td></tr><tr><td>Quiz</td><td>10</td></tr><tr><td><b>Total</b></td><td><b>30</b></td></tr></table>	Particulars	Marks	Class Tests	10	Assignments	10	Quiz	10	<b>Total</b>	<b>30</b>					
	Particulars	Marks														
	Class Tests	10														
	Assignments	10														
	Quiz	10														
	<b>Total</b>	<b>30</b>														
	<div>Est. in 1921</div> <div><b>Semester End examination</b> Written Examination (<b>70 marks</b>) Only problems(application type) to be expected</div>															
	<table><tr><th>Descriptive type</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>Small Problem</td><td>5 out of 8</td><td>5 x 2 = 10</td></tr><tr><td>Medium Problem</td><td>6 out of 9</td><td>6 x 5 = 30</td></tr><tr><td>Large Problem</td><td>2 out of 4</td><td>2 x 15 =30</td></tr><tr><td colspan="2"><b>Total</b></td><td><b>70</b></td></tr></table>	Descriptive type	Number of questions to be answered	Marks	Small Problem	5 out of 8	5 x 2 = 10	Medium Problem	6 out of 9	6 x 5 = 30	Large Problem	2 out of 4	2 x 15 =30	<b>Total</b>		<b>70</b>
	Descriptive type	Number of questions to be answered	Marks													
	Small Problem	5 out of 8	5 x 2 = 10													
Medium Problem	6 out of 9	6 x 5 = 30														
Large Problem	2 out of 4	2 x 15 =30														
<b>Total</b>		<b>70</b>														

### Reference


1. Chiang, A. C., & Wainwright, K. (2013). *Fundamental Methods of Mathematical Economics*.
2. Dowling, E. (2000). *Schaum's Outline of Introduction to Mathematical Economics*, 3rd Edition. McGraw Hill Professional
3. Anthony, M., Biggs, N., & Biggs, N. L. (1996). *Mathematics for Economics and Finance: Methods and Modelling*. Cambridge University Press.

4. Simon, C. P. (2010). *Mathematics For Economists*.
5. Jacques, I. (2017). *Mathematics for Economics and business*.

**Suggested Readings:**

1. Holden, K., & Pearson, A. W. (1992). *Introductory Mathematics for Economics and Business*.



 <p>Est. in 1921</p>	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>			
<b>Programme</b>	<b>BA (Hons) Economics</b>			
<b>Course Name</b>	<b>Time Series Econometrics</b>			
<b>Type of Course</b>	DCE			
<b>Course Code</b>	UC7DCEECO400			
<b>Course Level</b>	<b>400-499</b>			
<b>Course Summary</b>	The course is aimed to provide a thorough understanding of the time series econometric analysis for the students by providing practical skills.			
<b>Semester</b>	7	<b>Credits</b>		4      Total Hours
<b>Course Details</b>	Learning Approach	Lecture	Tutorial	Practical
		4		
				Others
	60			
<b>Pre- requisites, if any</b>	A computer lab is needed for delivering the practical in this course.			

#### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
1	Understand the various methods for analysing time series data.	U	1, 3
2	Apply the various methods for econometric analysis.	A	1, 2
3	Create models for univariate econometric analysis with appropriate model settings.	C	1,2, 10
4	Evaluate the various methods of stationarity tests.	E	1, 2
5	Analyse the models and forecasting methods.	An	2, 10
6	Apply the different time series forecasting methods.	A	1, 2, 10
7	Evaluate the stochastic processes.	E	1, 2
<i>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i>			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Introduction to Time Series analysis &amp; Time Series Decomposition</b>			
	1.1	Different Approaches to Time series: Univariate approach, multivariate approach, spectral approach, Structural time series approach	6	1, 2
	1.2	Time Series Decomposition - Trend, Cyclical, Seasonal, Irregular Components	3	1, 2
	1.3	Hodrick–Prescott filter—State Space Models and the Kalman filter (concepts Only)	3	2, 3
	1.4	Seasonal Index -Smoothing Techniques (concepts Only)	3	2, 3
	Practical: Time Series Decomposition.			
<b>2</b>	<b>Stochastic Process and Stationarity</b>			
	2.1	Stochastic Process—Ergodicity and Stationarity—White Noise Processes	5	7, 1, 2
	2.2	Non-Stationarity and Random Walk Models—Deterministic and Stochastic Trends / Trend and Difference Stationary Processes	5	2, 3, 7
	2.3	Integrated Stochastic Process— Martingale Process— Martingale Difference Process.	5	1, 2, 7
	Seminar: Stochastic Process			
<b>3</b>	<b>Stationarity Tests</b>			
	3.1	Non-Stationary Time Series and the Problem of Spurious Regression—Solutions—Transforming the Non-Stationary Time Series.	5	1, 2, 4
	3.2	Tests of Stationarity —Correlogram (ACF, PACF), and Unit Root Test— The Variance Ratio— Dicky-Fuller and Augmented Dicky-Fuller test -KPSS test- Non-parametric PP test— ADF-GLS Unit Root Test	5 (with practical)	1, 2, 3, 4
	3.3	Structural Equation & Lucas Critique - Structural Change – Chow-test	5	4, 3, 2
	Practical: Non-Stationarity Tests			


4	Time-Series Modelling and Forecasting				
	4.1	AR and MA Processes—ARMA and ARMAX—ARIMA and ARFIMA Modelling	5 (with practical)	2, 3, 5, 6	
	4.2	Volatility Measurement—ARCH and GARCH Models and Estimation—GARCH	5 (with practical)	2, 3, 5, 6	
	4.3	Time Series Forecasting— Single Equation and Simultaneous Equation Regression Modelling and the Lucas Critique.	5 (with practical)	2, 3, 5, 6	
	Practical: ARMA, ARMAX, GARCH and Forecasting.				
5	Teacher Specific Module				
Teaching and Learning Approach		Classroom Procedure (Mode of transaction) Teaching and Practical.			
Assessment Types		MODE OF ASSESSMENT			
		A. Continuous Comprehensive Assessment (CCA)			
		(1) Formative Assessment (FA)			
		Assessment type	Number	Marks for one assessment	Total Marks
		Assignment	2	05	10
		Viva Voce	1	20	20
		Total Marks			30
		(2) Summative Assessment (SA)			
		Assessment type	Number	Marks for one assessment	Total Marks
		Project Report	1	20	20
Case Study Report	1	10	10		
Total Marks			30		
		A. Semester End Examination. (As per MG University Regulations).			

## References

1. Enders, W. (2014). *Applied Econometric Time Series*. John Wiley & Sons.
2. Greene, W. H. (2017). *Econometric Analysis*. Pearson Education.
3. Pesaran, M. H. (2015). *Time Series and Panel Data Econometrics*. Oxford University Press
4. Wooldridge, J. M. (2015). *Introductory Econometrics: A Modern Approach*. Thomson, South Western.

## Suggested Readings

1. Yaffee, R. A., & McGee, M. (2000). *An Introduction to Time Series Analysis and Forecasting: With Applications of SAS and SPSS*. Academic Press.
2. Ashenfelter, O., Levine, P. B., & Zim, D. J. (2002). *Statistics and Econometrics: Methods and Application*. John Wiley & Sons.
3. Baltagi, B. H. (2013). *Econometric Analysis of Panel Data*. Springer.
4. Bhaumik, S. K. (2015). *Principles of Econometrics: A Modern Approach Using EViews*. Oxford University Press.
5. Brockwell, P. J., & Davis, R. A. (2002). *Introduction to Time Series and Forecasting*. Springer.
6. Brooks, C. (2019). *Introductory Econometrics for Finance*. Cambridge University Press.
7. Chatfield, C. (2003). *The Analysis of Time Series: An Introduction*. Chapman and Hall.
8. Gujarati, D., Porter, D. C., & Pal, M. (2020). *Basic Econometrics*. McGraw Hill.
9. Hamilton, J. D. (1994). *Time Series Analysis*. Princeton University Press.
10. Heiss, F. (2020). *Using R for Introductory Econometrics*. Create Space Independent Publishing Platform.
11. Hsiao, C. (2014). *Analysis of Panel Data*. Cambridge University Press.
12. Kirchgassner, G., Wolters, J., & Hassler, U. (2013). *Introduction to Modern Time Series Analysis*. Springer.
13. Maddala, G. S. (2010). *Unit roots, Cointegration, and Structural Change*. Cambridge University Press.
14. Makridakis, S., Wheelwright, S. C., & Rob, J. H. (1998). *Forecasting: Methods and Applications*. John Wiley & Sons.
15. Pesaran, M. H., & Smith, R. (1995). The Role of Theory in Econometrics M. Hashem Pesaran Ron Smith. *Journal of Econometrics*(67), 61-79.
16. Rachev, S. T., Mittnik, S., Fabozzi, F. J., Focardi, S. M., & Jasic, T. (2007). *Financial Econometrics: From Basics to Advanced Modeling Techniques*. John Wiley & Sons.
17. Stock, J. H., & Watson, M. W. (2020). *Introduction to Econometrics*. Pearson Education.

<div>Est. in 1921</div> <div></div>	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Insurance, Banking and Financial Services</b>					
<b>Type of Course</b>	<b>DCE</b>					
<b>Course Code</b>	<b>UC7DCEECO401</b>					
<b>Course Level</b>	<b>400-499</b>					
<b>Course Summary</b>	This course is designed to equip learners with a strong foundation in financial theory, industry practices and regulatory frameworks and prepare them for real world challenges within the financial industry. Emphasis will be placed on understanding the interrelationships between banking , insurance and financial markets and their roles in the broader economy					
<b>Semester</b>	<b>7</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>		<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	<b>Others</b>	
	<b>Learning Approach</b>	<b>4</b>				
<b>Pre- requisites, if any</b>						

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	understanding the concepts of insurance and the pivotal role of financial institutions in driving economic activities and fostering growth.	U	3
2	Learning about different types of banking and financial institutions and their functions	K	10
3	Examine the regulatory framework governing insurance, banking and other financial products and services	An	6
4	Apply theoretical knowledge to analyse and solve real world scenarios in insurance, banking and financial services	A	2
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
1	Introduction to Insurance		20	
	1.1	Introduction to Insurance, Definition and purpose of insurance , Types of Insurance (Life, Health, Property etc.),	4	1
	1.2	Principles of risk management, Types of risks and their classification	3	4
	1.3	Impact of banking and insurance sectors on economic growth	2	2
	1.4	Role of Insurance in economic development	2	1
	1.5	Actuarial concepts and Insurance Pricing	2	3



	Subsidiary works 1. Discussion about the importance of insurance in managing risks and protecting individuals and businesses 2. Discussion and analysis of the policy terms and conditions, including coverage limits, deductibles, exclusions and claim procedures 3. Identify key provisions that illustrate insurance concepts such as indemnity, insurable interest and subrogation		7	4
<b>2</b>	<b>Insurance Principles and Practices</b>		<b>21</b>	
	2.1	Basic Principles of Insurance	3	1
	2.2	Insurance Underwriting and Claims Process, Regulatory Environment in Insurance	4	1,3
	2.3	Reinsurance and alternative risk transfer mechanisms, Insurance market dynamics and trends in Economic Developments.	3	1
	2.4	Insurance Regulation And Development Authority (IRDA)- Role And Functions Of Insurance Companies –Bancassurance- Assurbanking.	4	3
	Subsidiary works 1. Discuss and identify emerging trends impacting insurance products and services		7	
<b>3</b>	<b>Banking Operations</b>		<b>18</b>	
	3.1	Evolution of Banking Systems	1	1
	3.2	Types of Banks and Financial Institutions	1	2
	3.3	Structure of the Banking Industry (Central Bank, Commercial Banks etc.)	3	2
	3.4	Functions of Banks	2	2
	3.5	Banking Products and Services	2	1,4
	3.6	Technology and Innovation in Banking(core banking, Internet Banking, fintech and digital disruption, cyber security and fraud prevention)	2	4


	3.7	Contemporary Issues in Banking(Financial inclusion and Social Banking, sustainable Banking Practices)	2	4
	Subsidiary works 1. Discuss the transformative role of technology and innovation in shaping modern banking services 2. Discuss contemporary issues impacting the banking industry including financial inclusion and social responsibility		5	
<b>4</b>	<b>Financial Services</b>		<b>16</b>	
	4.1	Introduction to Financial Services	1	1
	4.2	Financial Products and services	2	3
	4.3	Financial markets and instruments	2	2
	4.4	Financial Regulation, Role of Regulatory Bodies, Regulatory framework for consumer protection	2	3
	4.5	Technology and Innovation in financial services	2	4
	Subsidiary works 1. Compare and contrast financial products through discussions 2. Discussion on how technology is reshaping the financial services 3. Present a case study involving a new fintech product or service		7	
<b>5</b>	<b>Teacher Specific Module</b>			

Teaching and Learning Approach	<p><b>Classroom Procedure (Mode of transaction)</b></p> <p>Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge</p> <p>Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions</p> <p><b>Suggested Course Delivery Methods</b></p> <ul style="list-style-type: none"><li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>o CD2 - Tutorials/Assignments</li><li>o CD3 - Class Seminars</li><li>o CD4 - Peer group discussions</li></ul>																																
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## Reference

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2. Gupta, N. K., Financial Markets, Institutions and Services, Ane Books Pvt. Ltd. New Delhi
3. Khan, M.Y., Financial Services - Tata McGraw Hill New Delhi.
4. Siddaiah, T., Financial Services Pearson Education New Delhi.
5. Shekhar, K.C, Banking Theory and Practice, Vikas Publishing House, New Delhi
6. Maheswari, S.N., Banking Law and Practice, Kalyani Publishers, New Delhi
7. Sundharam, Varshney, Banking Theory Law & Practice, Sulthan Chand & Sons, New Delhi.
8. Agarwal, O.P., Banking and Insurance, Himalya Publishing House, Mumbai
9. Saxena, G.S., Legal Aspects of Banking Operations, Sultan Chand and Sons, New Delhi
11. Tripathi, Nalini & Prabil Pal., Insurance: Theory and Practice, PHI Pvt Ltd, New Delhi
12. Gupta, P.K., Insurance and Risk Management, Himalaya Publishing House, Mumbai
13. Mishra, M.N., Principles and Practices of Insurance, S. Chand and Sons, New Delhi



 <p>Est. in 1921</p>	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>	<b>BA (Hons) Economics</b>				
<b>Course Name</b>	<b>Quantitative Economics - III</b>				
<b>Type of Course</b>	<b>DCE</b>				
<b>Course Code</b>	<b>UC7DCEECO402</b>				
<b>Course Level</b>	<b>400-499</b>				
<b>Course Summary</b>	This course is designed to equip learners with the fundamental statistical tools used in economic analysis. This course also aims at empowering students with the basic requirements for analysing economic data.				
<b>Semester</b>	<b>7</b>	<b>Credits</b>			<b>4</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	<b>Others</b>
		<b>4</b>			
<b>Pre-requisites, if any</b>	Attempting Quantitative Economics I, and II.				

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Understand the fundamental concepts essential for optimisation in economic analysis	U	2
2	Apply optimisation techniques in economic analysis the presence of inequality constraints	A	2
3	Formulate problems in economics into LP problems	C	1, 2
4	Understand the concepts of probability distribution, sampling distribution and the steps involved in statistical inference.	U	2
5	Apply inferential statistics for decision making in economics.	A	1
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
1	<b>Optimisation in Economics</b>			
	1.1	Partial derivatives – higher order derivatives – Gradient Vector - Jacobian – Hessian – Discriminant	5	
	1.2	Applications of partial differentiation in economics -National Income model: multipliers (investment, government expenditure, tax) - partial elasticities of demand.	5	
	1.3	Multivariable optimization - Constrained optimisation and the Bordered Hessian – Lagrange multiplier	5	

	1.4	Optimisation problems associated with utility functions, cost functions, production function (Cobb-Douglas, CES, VES)	5	
<b>Practicum:</b>	1. Illustrate optimization problems geometrically and algebraically using the profit maximisation problem			
<b>2</b>	<b>Linear Programming</b>			
	2.1	Duality theory, constrained optimization with inequality and non-negativity constraints - KuhnTucker formulation	5	
	2.2	Formulation of LPP - primal and dual - solution using graphical and simplex methods	5	
<b>Practicum</b>	1. Illustrate formulation of LPP taking one example each from agriculture, production, marketing, transportation and finance (may use ref. 9)			
<b>3</b>	<b>Probability theory and Sampling distribution</b>			
	3.1	Random variables : Discrete and Continuous - Bivariate random variables – Joint PDF, Marginal PDF and Conditional PDF	3	3
	3.2	Probability distributions - Log-normal distribution - pdf, relation between normal and log-normal distribution.	3	3
	3.3	Sampling distribution – Standard Error - tables of Chi-square, t, and F distributions. Examples of statistics following these distributions	5	3,4
	3.4	Law of large numbers and Central Limit theorem(Statement and concepts only)	2	3

<b>Practicum</b>	1. Illustrate the meaning and concept of the tables of the theoretical distributions - Z, t, F, Chi-Square etc.			
<b>4</b>	<b>Statistical Inference – Estimation and hypothesis testing</b>			
	4.1	Estimation; concept - point and interval estimation - properties of good estimators	2	3,4
	4.2	Maximum Likelihood and Method of Moments estimators (concept only-no derivations required)	2	3,4
	4.3	Interval estimation - Confidence Interval - population mean of normal distribution when population variance is known and unknown	3	3,4
	4.4	Hypothesis testing - Hypothesis - Rejection and acceptance region - Type I and Type II errors, Significance level and power of a test, the p-value of a test	3	3
	4.5	Large sample tests of population mean - one sample and two samples - proportion of a population - one sample and two samples	3	3,4
	4.6	Small sample tests of mean and variance of normal population - one sample and two samples - paired sample and independent sample tests - ratio of variances of two normal populations	4	3,4
<b>Practicum:</b>	1. Illustration using a data set the process of point and interval estimations 2. Use two datasets from economics to explain the large sample and small sets			
<b>5</b>	<b>Teacher Specific Module</b>			



<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>o CD2 - Tutorials/Assignments</li><li>o CD3 - Class Seminars</li><li>o CD4 - Peer group discussions</li></ul>												
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### Reference

1. Chiang, A. C., & Wainwright, K. (2013). *Fundamental Methods of Mathematical Economics*.
2. Dowling, E. (2000). *Schaum's Outline of Introduction to Mathematical Economics*, 3rd Edition. McGraw Hill Professional
3. Sydsaeter, Knut, et al. (2016) *Essential Mathematics for Economic Analysis*. Pearson Higher Ed
4. Anthony, M., Biggs, N., & Biggs, N. L. (1996). *Mathematics for Economics and Finance: Methods and Modelling*. Cambridge University Press.
5. Simon, C. P. (2010). *Mathematics For Economists*.
6. Jacques, I. (2017). *Mathematics for Economics and business*.
7. Mendenhall, W., Beaver, B. M., & Beaver, R. J. (2019). *Introduction to probability and statistics*.
8. McClave, J. T., Benson, P. G., & Sincich, T. (2018). *Statistics for Business and Economics, Global Edition*.
9. Sharma, J. K. (2016) *Operations Research: Theory and Applications*.

### .Suggested Readings:

1. Holden, K., & Pearson, A. W. (1992). *Introductory Mathematics for Economics and Business*.

<div>Est. in 1921</div> <div></div>		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>		<b>BA (Hons) Economics</b>				
<b>Course Name</b>		<b>Public Economics - II</b>				
<b>Type of Course</b>		<b>DCE</b>				
<b>Course Code</b>		UC7DCEECO403				
<b>Course Level</b>		<b>400-499</b>				
<b>Course Summary</b>		The study of Public Economics and Indian Public Finance explores government intervention's impact on economic efficiency and equity. It delves into taxation, public goods, externalities, and welfare economics. Indian Public Finance focuses on the fiscal policies and challenges specific to India, including tax structures, subsidies, and government expenditure. Emphasizing economic development and social welfare, it analyzes the Indian economy's fiscal aspects, considering federalism, public debt, and budgetary policies.				
<b>Semester</b>	<b>7</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical</b>	<b>Others</b>	<b>60</b>
		<b>4</b>				
<b>Pre-requisites if any</b>	Students should have a basic economic Knowledge					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Develop the rationale for and role of Government intervention in Economic activities and how Government makes economic decisions.	U,A,K	1
2	Understand the complexities of public goods provision in Public Economics, and to learn their significance within different economic structures.	U,E	2
3	Analyse the diverse fiscal policies employed in India, and to learn their impact on economic growth and social welfare.	An,A ,Ap	1
4	Create innovative strategies for optimizing government spending in Indian Public Finance, to propose budgetary frameworks conducive to sustainable development.	C,Ap	6
5	Synthesize the relationship between externalities and policy interventions in the Indian economic landscape and state and union budget trends.	S,R	0
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

### COURSE CONTENT

#### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>		<b>Economic Analysis of Public Goods and externalities</b>	<b>15</b>	
	1.1	Public goods: Pure and Impure Public Goods.	1	1
	1.2	Market failure and Externalities- Types of Externalities, Coase Theorem and Property Rights, Free-Rider Problem	3	1,2
	1.3	Changing role of government in modern society.	3	1,3,4

	1.4	Global public goods	2	1
	1.5	Optimal provision of public goods- Voluntary Exchange Models - Samuelson's contribution. Lindahl's approach.	3	2,5
	1.6	The Theory of Clubs and Local Public Goods- Tiebout Model.	3	1,2
<b>2</b>		<b>Economic Decision Making of the Government</b>	<b>15</b>	
	2.1	Voting and Public Choice - Reasons for Public Choice- Public Choice under Direct Democracy unanimity rule-Wicksell approach	4	1,2,3
	2.2	Majority Rule- Buchanan and Tullock model - Bowen Black model	1	3
	2.3	Normative social choice theory- Arrow's theorem- Majority Voting-The Median Voter Model- Representative Democracy -Downs Model on Demand and Supply of Government Policy- Niskanen Model of Bureaucratic Behaviour.	4	3
	2.4	Positive Social Choice Theory: The Leviathan Hypothesis- Theory of Rent Seeking - Property Rights Dimension, Rent Seeking and X- Efficiency	4	4
	2.5	Lobbying and Interest Groups.	2	5
<b>3</b>		<b>Fiscal Administration and Management</b>	<b>15</b>	
	3.1	Incidence of Taxation- Optimal theory of Taxation - Dead Weight Loss -Equity Vs Efficiency	3	1
	3.2	Impact and Incidence of Taxation	1	1
	3.3	Theories of Public Expenditure: Adolf Wagner- Wiseman- Peacock - Colin Clark- Bowen Model, Lindahl Model, Pigou Model and Samuelson Model	4	2
	3.4	Theories of Public debt: Classical -Keynesian – Modern	2	2
	3.5	Burden of Public Debt - Intergenerational Equity theory - Buchanan Thesis	1	3,4
	3.6	Deficit concepts-Problem of fiscal deficit-Corrective measures- FRBM Act	1	5

	3.7	Budgetary Policy- An evaluation of current budget in India	1	5
<b>4</b>		<b>Fiscal Federalism: Theory and Practice</b>	<b>15</b>	
	4.1	Theory of Fiscal Federalism: The Decentralization Theorem.	4	3
	4.2	Issues of fiscal federalism in India	4	3
	4.3	Finance commission and it's role	4	1
	4.4	State finance Commission and Panchayat Raj institutions	3	5

5		Teacher specific Module													
Teaching and Learning Approach	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>o CD2 - Tutorials/Assignments</li><li>o CD3 - Class Seminars</li><li>o CD4 - Peer group Discussions</li></ul>														
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Total	30														


<b>B. Semester End examination</b> <b>Written Examination (MCQ 10 marks and Written Answers 60 marks)</b>			
<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
Short Answer	50 words	5 out of 8	5 x 2 = 10
Short Essay	150 words	4 out of 7	4 x 5 = 20
Essays	450 words	2 out of 4	2 x 15 = 30
MCQ	NA	10	10 x 1 = 10
<b>Total</b>			<b>70</b>

### References

1. Rosen and Gayer (2014) Public finance, 10th Ed, MC Graw-Hill, New York.
2. Public Economics Principles and Practice- Peter Abelson: online Edition 2018. [www.appliedeconomics.com.au](http://www.appliedeconomics.com.au).
3. Economics of the Public sector, Joseph E. Stiglitz, Jay K Rosengard 4th Ed. W.W Norton & Company, INC, New York.
4. Public finance and public choice, John Cullis and Phillip Cullis (2009) OUP, Oxford
5. Public Finance in theory and practice 5th Ed., Musgrave and Musgrave.

### Suggested Readings

1. Public Economics in India Janak Raj Gupta
2. Indian fiscal federalism, Y.V Reddy and GR Reddy, OUP, 2019.
3. Public finance -BP Tyagi, HP Singh,
4. Studies in Indian Public Finance M. Govind Rao, OUP, 2022. Public finance principles and practice - JVM Sarma, OUP, 2018

	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>			
<b>Programme</b>	<b>BA (Hons) Economics</b>			
<b>Course Name</b>	<b>Resource Economics and Environmental Accounting</b>			
<b>Type of Course</b>	<b>DCE</b>			
<b>Course Code</b>	<b>UC7DCEECO404</b>			
<b>Course Level</b>	<b>400 - 499</b>			
<b>Course Summary</b>	<p>The course "Resource Economics and Environmental Accounting" is designed to impart higher-level procedural knowledge aligned with revised Bloom's Taxonomy. explores the intersection of economics, natural resource management, and environmental sustainability. The initial unit provides an overview of the utilization and inventory of resources, delving into the evolving landscape. Subsequently, the focus shifts towards a critical examination of the sustainability concept in relation to environmental preservation. The fourth unit undertakes a comparative analysis between the traditional national income system and green accounting. The final unit (V) sheds light on the pivotal role of human resources, exploring their dynamic nature. The curriculum often addresses topics such as environmental economics, the valuation of ecosystem services, policy analysis for sustainable development, and the economic implications of resource depletion. The goal is to equip students with the</p> <p>knowledge and analytical tools to understand, evaluate, and contribute to sustainable development efforts in the context of resource management.</p>			
<b>Semester</b>	<b>7</b>	<b>Credits</b>	<b>4</b>	<b>Total Hours</b>



Course Details	Learning Approach	Lecture	Tutorial	Practical / Practicum	Others	
		4				
e-requisites, any						

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### **COURSE OUTCOMES (CO)**

<b>CO No.</b>	<b>Expected Course Outcome</b>	<b>Learning Domains *</b>	<b>PO No</b>
1	comprehend the categorization of resources, principles of sustainable development, concepts of green accounting, and the components of a green economy.	U	1,3, 6
2	assess and contrast resource categories, including conservation and extraction; traditional National Income (NI) accounts versus green accounts; and the conventional economy versus the ecological economy.	C, S	1,4,6
3	critically examine the key issues such as the tragedy of the commons, sustainable yield, the political economy of green accounts, growth constraints, and the challenges associated with human development.	E, An, S	4,5,6,10
4	synthesises the diverging aspects of private good and common property resources, economic development and sustainable development, the system of national accounts and environmental accounts, education and health in human resource development.	E, An, AP	2,3,5,6
5	internalize the concepts of resource use, environmental policy, green accounting techniques, future of global economy, and the strength of human resource development.	Ap, I, S	2,6,8

***\*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)***

## COURSE CONTENT

### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Fundamentals of Resource Economics</b>		<b>9</b>	
	1.1	Definitions and Scope of Resource Economics - Major economic resources -classification of resources	3	1, 2, 3
	1.2	Protecting renewable and non-renewable resources - Common property resources and 'the tragedy of commons' - Case of fishery Resources	4	2,3,4
	1.3	The trend in resource use -Managing resource exhaustibility	2	2, 4
<b>2</b>	<b>Sustainable Development and Human Resources</b>		<b>16</b>	
	2.1	Principle of maximum sustainable yield –Hotelling rule - Limits to growth	3	1, 4
	2.2	Man is a vital resource for Development-process of human resource formation	2	1,3,5
	2.3	Human Development and Environment - population projections and resource constraints.	2	1,2,5
	2.4	Sustainable Development – evolution and definitions of the concept.	2	1,3,4,5
	2.5	Inter-generational and intra-generational equity – the outcome versus input for output approach- Weak and Strong sustainability rules - Daly's operational Principles and Maintaining system resilience	4	1,4
	2.6	Economic indicators of sustainability- Green NNP and Genuine Savings	3	1, 5

<b>3</b>	<b>Environmental Accounting for Sustainable Development</b>		<b>11</b>	
	3.1	Environmental Accounting –SEEA-objectives -supply and use accounts, asset accounts	3	1,4, 5
	3.2	Environmental protection expenditures and modification of the System of National Accounts.	2	4,5
	3.3	Development of green Accounts-Satellite based environmental accounting -Matrix approach – Difficulties of accounting nature and environment	4	3, 5
	3.4	Environment and Natural Resource Accounting in India (ENRA) background, physical and economic accounts	2	3,4,5
<b>4</b>	<b>Designing a Green Economy</b>		<b>9</b>	
	4.1	The shape of the eco-economy, restructuring the economy, new industries and new jobs,	3	1,2,3
	4.2	investment opportunity - building the solar/ hydrogen economy. Energy efficiency, alternate forms of energy, harnessing the wind, sunlight wave, geo thermal, natural gas and hydrogen economy.	3	1,2,5
	4.3	Designing a new materials economy -feeding everyone well -protecting forest products and services. Redesigning cities for people	3	1,2,4,5
<b>Practicum</b>	<b>1:</b> Workshop for green accounting or Internship (one Week) – (Workbook/internship report submission is mandatory)		15	1,2,4,5
	<b>2:</b> Interactions with Green Auditors or One-week Internship (Workbook/internship report is mandatory)		15	1,2,4,5
<b>5</b>	<b>Teacher specific Module</b>			
<b>Teaching and Learning Approach</b>	<b>Suggested Classroom Procedure (Mode of transaction)</b> CD1- Classroom Lectures: Traditional lectures can provide a solid foundation of theoretical knowledge on resource economics and sustainable development. Use multimedia presentations, case studies, and real-world examples to illustrate concepts and theories.			

	<p>CD2 - Interactive Discussions: Foster student engagement through interactive class discussions. Encourage students to express their thoughts on key topics and share their perspectives on sustainable resource management. Facilitate debates on current issues related to resource economics and sustainable development.</p> <p>CD3 - Case Studies: Introduce real-life case studies that highlight successful and unsuccessful examples of resource management and sustainable development. Analyze case studies collaboratively, encouraging students to apply theoretical concepts to practical situations.</p> <p>CD4 - Field Trips and Guest Speakers: Arrange field trips to relevant sites, such as sustainable development projects, resource management organizations, or eco-friendly businesses. Invite guest speakers from the industry, academia, or government agencies to share their experiences and insights with the students.</p> <p>CD5 - Project-Based Learning: Assign projects that require students to research and develop solutions for real-world challenges in resource economics and sustainable development. Encourage collaborative projects that integrate knowledge from various disciplines and promote critical thinking.</p>															
Assessment Types	<p><b>MODE OF ASSESSMENT</b></p> <p><b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b></p> <table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Class Tests</td><td>15</td></tr><tr><td>Assignments</td><td>5</td></tr><tr><td>Seminar/Viva</td><td>5</td></tr><tr><td>Project/Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr><tr><td><b>Total</b></td><td><b>30</b></td></tr></table>				Particulars	Marks	Class Tests	15	Assignments	5	Seminar/Viva	5	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	<b>Total</b>	<b>30</b>
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Seminar/Viva	5															
Project/Practicum/Quiz/Book Review/Fieldwork etc.	5															
<b>Total</b>	<b>30</b>															
	<p><b>B. Semester End examination</b></p> <p><b>1. Written Examination for 50 marks</b></p> <table><tr><th>Descriptive Type</th><th>Word Limit</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td></td><td></td><td></td><td></td></tr></table>				Descriptive Type	Word Limit	Number of questions to be answered	Marks								
Descriptive Type	Word Limit	Number of questions to be answered	Marks													

	Short Answer	50 words	4 out of 6	$4 \times 3 = 12$
	Short Essay	150 words	3 out of 6	$3 \times 6 = 18$
	Essays	300 words	2 out of 4	$2 \times 10 = 20$
	<b>Sub Total</b>			<b>50</b>
	<b>2. Workbook / Internship Report evaluation by an external subject expert (Academics / Industry)</b>			<b>20</b>
	<b>Grand Total</b>			<b>70</b>


## References

1. Blunden, J. "Mineral resources." Blunden J. and Allan Reddish (eds.), *Energy, Resources and Environment*, London, Hodder and Stoughton, 1997.
2. World Resources Institute. *Annual reports*.
3. Sankar, U. *Environmental Economics*, New Delhi, OUP, 2009.
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5. Goldenberg, J. et.al. *Energy for a Sustainable Future*, New Delhi, Wiley Eastern Ltd, 1998.
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9. Bhattacharya, Rabindra N. *Environmental Economics: An Indian Perspective*. OUP, 2007. New Delhi. Chapter 2.
10. Sanker, Uluganathan. *Environmental Economics*. OUP, 2009. New Delhi. Chapters 4, 5, 10, and 11.

11. Hanley, Nick, et al. *Environmental Economics in Theory and Practice*. Palgrave Macmillan, 2009. New York. Chapter 2.
12. World Commission on Environment and Development (WCED). *Our Common Future*. OUP, 1987. Delhi.
13. Das Gupta, N. *Environmental Accounting*. Wheeler and Co, 1997. New Delhi. Chapters 1- 6.
14. Bhattacharya, Rabindra N. *Environmental Economics: An Indian Perspective*. OUP, 2007. New Delhi. Chapter 5.
15. Brown, Lester R. *Eco-Economy*. Orient Longman, 2003. Hyderabad. Chapters 4-9.
16. Brown, Peter G., and Geoffrey Garver. *Right Relationship: Building a Whole Earth Economy*. Berrett-Koehler Publishers, 2009. San Francisco.
17. Korten, David C. *Getting to the 21st Century*. Oxford and IBH, 1992. New Delhi.

### **Suggested Readings**

1. World Resources Institute. *Annual reports*.
2. Sankar, U. *Environmental Economics*, New Delhi, OUP, 2009.
3. Bhattacharya, Rabindra N. *Environmental Economics: An Indian Perspective*. OUP, 2007. New Delhi.
4. Brown, Lester R. *Eco-Economy*. Orient Longman, 2003. Hyderabad.
5. Brown, Peter G., and Geoffrey Garver. *Right Relationship: Building a Whole Earth Economy*. Berrett-Koehler Publishers, 2009. San Francisco.
6. Korten, David C. *Getting to the 21st Century*. Oxford and IBH, 1992. New Delhi.
7. Hanley, Nick, et al. *Environmental Economics in Theory and Practice*. Palgrave Macmillan, 2009. New York.

<div>Est. in 1921</div> 	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Research Methodology for Economics</b>					
<b>Type of Course</b>	<b>DCE</b>					
<b>Course Code</b>	<b>UC7DCEECO405</b>					
<b>Course Level</b>	<b>400-499</b>					
<b>Course Summary</b>	This advanced course is meticulously crafted to equip students with a profound understanding of research methodology within the expansive realm of social science, with a specific focus on the field of economics. The curriculum is strategically designed to delve into diverse research methods, tools, and techniques, offering students a robust foundation for conducting rigorous and impactful research.					
<b>Semester</b>	<b>7</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/ Practicum</b>	<b>Others</b>	
		<b>4</b>				<b>60</b>
<b>Pre- requisites, if any</b>						

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, students will be able to;	Learning Domains *	PO No
1	Present fundamental concepts and principles of research methodology in social sciences.	K, U	1,3, 6
2	Demonstrate research methodologies through hands-on exercises and projects.	A, C, S	1,4,6
3	Critically evaluate the strengths, and limitations associated with different research approaches.	E, An, S	4,5,6,10
4	Develop the skills necessary to design, conduct, and analyze research in a rigorous manner	E, An, AP	2,3,5,6
5	apply statistical skills in the analysis and interpretation of research data	S, I, Ap	4,5,6,8,9,10
6	Apply acquired knowledge to address real-world economic issues through a culminating research project.	Ap, I, S	2,6,8
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
1		<b>Introduction to Research Methodology and Design</b>	<b>9</b>	
	1.1	Definition and Nature of Research Understanding the research process Types of research: Exploratory, Descriptive, Analytical	2	1, 2, 3
	1.2	Research Problem Formulation Identifying and defining research problems Formulating research questions and objectives	2	1, 2,3
	1.3	Basics of Research Design Experimental, Descriptive, and Exploratory designs Cross-sectional vs. Longitudinal designs	2	2, 3, 4
	1.4	Sampling Techniques Probability and non-probability sampling Random sampling, stratified sampling, purposive sampling	3	1,3,4



<b>2</b>	<b>Methods of Data Collection</b>		<b>15</b>	
	2.1	Primary Data Collection Surveys, Interviews, Observations Questionnaire design and administration	5	1, 4
	2.2	Secondary Data Collection Utilizing existing data sources Data archives and repositories	5	1,3,6
	2.3	Quantitative Data Analysis Descriptive and inferential statistics – (Overview only) Introduction to Statistical packages (e.g. EViews, SPSS)	5	1,2,6



<b>3</b>	<b>Data Analysis and Interpretation</b>		<b>18</b>	
	3.1	Testing of Hypothesis (Parametric or Standard Tests of Hypothesis) – Chi-square Test – Analysis of Variance and Covariance	6	4,5,6
	3.2	Testing of Hypothesis (nonparametric or Distribution-free tests) – Multivariate analysis techniques	6	4,5,6
	3.3	Qualitative Data Analysis Content analysis, thematic analysis Coding and interpretation	6	1,3,4,6
<b>4</b>	<b>Writing and Presenting Research Findings</b>		<b>18</b>	
	4.1	Research Report Writing Structure and components Citation styles (APA, MLA) and online tools	6	1,4,5,6
	4.2	Effective Presentation Skills Preparing and delivering research presentations	6	4,5,6
	4.3	Ethical Principles in Research Informed consent, confidentiality, and privacy Handling sensitive issues and vulnerable populations	6	3,5,6
<b>5</b>	<b>Teacher Specific Module</b>			

MGU-UGP (HONOURS)

Syllabus


<p><b>Teaching and Learning Approach</b></p>	<p><b>Suggested Classroom Procedure</b> (Mode of transaction)</p> <p>CD1 Traditional Classroom Lectures: In-person lectures facilitated by an experienced instructor. This method is suitable for delivering foundational content (Module 1) where concepts need to be explained, and students can engage in discussions. It's also effective for addressing ethical principles (Module 4) through real-time discussions and case studies.</p> <p>CD2. Interactive Workshops: Conduct interactive workshops combining lectures with hands-on activities, group discussions, and case studies. This method is ideal for engaging students in problem-solving activities related to research problem formulation (Unit 1.2) and developing practical skills in data collection methods (Unit 2.1).</p> <p>CD3. Online Modules and Tutorials: Identify or suggest online platforms to transact content asynchronously, including video lectures, tutorials, and quizzes. Online platforms are effective for covering theoretical aspects of research methodology and design (Module 1) and providing tutorials on statistical tools (Unit 2.3) and data analysis methods (Unit 2.4). It allows students to learn at their own pace.</p> <p>CD4. Research Project-Based Learning: Incorporate a research project into the course, where students apply the concepts learned in Modules 1 and 2 to a real-world problem. This method is highly effective for reinforcing learning</p>
	<p>outcomes related to research problem formulation, data collection, and analysis. It encourages practical application and critical thinking.</p> <p>CD5. Experts Sessions: Invite guest speakers who are experts in research methodology and practitioners in the field. Experts enhance the understanding of practical aspects of research design (Unit 1.3) and data collection methods (Unit 2.1). Industry practitioners can share insights on ethical considerations and effective presentation skills (Module 4).</p> <p>These delivery methods can be combined or adapted based on the specific needs and preferences of the students and the course instructor.</p>

	<p><b>MODE OF ASSESSMENT</b></p> <p><b>Continuous Comprehensive Assessment (CCA) – 30 Marks</b></p> <table border="1" data-bbox="568 1522 1396 1801"> <thead> <tr> <th>Particulars</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>Class Tests</td><td>15</td></tr> <tr> <td>Assignments</td><td>5</td></tr> <tr> <td>Seminar/Viva</td><td>5</td></tr> <tr> <td>Project/Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr> <tr> <td><b>Total</b></td><td><b>30</b></td></tr> </tbody> </table>	Particulars	Marks	Class Tests	15	Assignments	5	Seminar/Viva	5	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	<b>Total</b>	<b>30</b>
Particulars	Marks												
Class Tests	15												
Assignments	5												
Seminar/Viva	5												
Project/Practicum/Quiz/Book Review/Fieldwork etc.	5												
<b>Total</b>	<b>30</b>												

<b>Assessment Types</b>	<b>Semester End examination</b> Written Examination (MCQ 10 marks and Written Answers 60 marks)			
	<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	4 out of 7	4 x 5 = 20
	Essays	450 words	2 out of 4	2 x 15 = 30
	MCQ	NA	10	10 x 1 = 10
	<b>Total</b>			<b>70</b>

#### References:

1. Kothari, C. R. (2008). Research Methodology: Methods and Techniques. New Age International.
2. Trivedi, P. (2016). Research Methodology: A Step-by-Step Guide for Beginners. SAGE Publications.
3. Yadav, R. (2016). Research Methodology: A Step-by-Step Guide for Beginners. Pearson.
4. Kumar, R. (2019). Research Methodology: A Step-by-Step Guide for Researchers. SAGE Publications.
5. Sekaran, U., & Bougie, R. (2016). Research Methods for Business: A Skill-Building Approach. Wiley.
6. Agarwal, P. (2010). Research Methodology: Methods and Techniques. APH Publishing Corporation.
7. Bryman, A. (2016). Social Research Methods. Oxford University Press.
8. Corbin, J., & Strauss, A. (2014). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. SAGE Publications
9. Creswell, J. W. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. SAGE Publications.
10. Panneerselvam, R. (2014). Research Methodology. PHI Learning Pvt. Ltd.
11. De Vaus, D. (2001). Research Design in Social Research. SAGE Publications.
12. Naresh, J. (2009). Social Research Methods: Qualitative and Quantitative Approaches. PHI Learning Pvt. Ltd.

 <p>Est. in 1921</p>	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>	<b>BA (Hons) Economics</b>				
<b>Course Name</b>	<b>Techniques for fieldwork and research</b>				
<b>Type of Course</b>	<b>DSE</b>				
<b>Course Code</b>	<b>UC7DSEECO400</b>				
<b>Course Level</b>	<b>400-499</b>				
<b>Course Summary</b>	<p>This dynamic course equips learners with the essential skills and methodologies to excel in fieldwork and research across diverse disciplines. Merging theory with hands-on experience, learners explore the fundamentals of planning, executing, and analyzing research projects. Master research design, data collection methods like surveys and interviews, and ethical considerations in research. Explore various methodologies, from observations to experiments, and gain practical experience applying them in real-world settings. Learn to organize and analyze data using software tools and statistical techniques, extracting meaningful insights from your research. Learners will be empowered to conduct independent research projects with confidence and professionalism.</p>				
<b>Semester</b>	<b>7</b>	<b>Credits</b>			<b>4</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	<b>Others</b>
		4			
<b>Pre-requisites, if any</b>	Basic knowledge of spreadsheet				

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the learner will be able to:</i>	Learning Domains *	PO No
1	explain the significance of primary data and its factual level implications in academic study.	U, A, An	6
2	review the meaning and characteristics of surveys and their application in academic studies	A, An	9
3	demonstrate the steps involved in conducting a survey, from planning to data analysis.	C	9
4	interpret the purposes of sampling and their applications in different sizes and characters of population.	E	3, 1
5	employ the basic approaches of scientific research for academic investigations.	C	1,4
6	make use of the tools for a comprehensive study proposal and be adept at data processing tasks and report writing.	C, S, Ap	1, 10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
1		<b>Foundations of Research</b>	12	
	1.1	Research – Scientific method – Social science research - Limitations of social science research	2	1, 2
	1.2	Types and Methods of research – pure, applied, exploratory, descriptive, diagnostic, evaluation, action research, experimental research, analytical study, historical research, surveys, field study, case study	5	1,2

	1.3	Overview of steps in research: Planning (literature review, selection of the problem, operationalization of concepts, research design) – Operation (tools of data collection, pre-testing and revision, collection of data, processing of data, analysis of data) - Reporting	5	2,3
<b>2</b>	<b>Field Work and Sampling Techniques</b>		<b>15</b>	
	2.1	Planning of Survey Study: Study design: meaning – importance – content of study proposal or plan: introduction -statement of the problem- review of previous studies – scope of the study – objectives – conceptual model- hypothesis- operational definition of concepts – significance – geographical area covered – reference period – methodology – sampling plan – tools for gathering data – plan of analysis – chapter scheme – time budget – financial budget (Procedural Level)	5	2,3
	2.2	Sampling Techniques: Population and sample, Census Enquiry and Sampling, Purposive and non-purposive Sampling, Sample Size	5	2,3
	2.3	Sampling Procedure: SRS (WR and WOR), Stratified, Systematic, Repeated Systematic, Cluster and Multi-Stage cluster, Quota Sampling and Sequential Sampling, Sample Weights and Choice of Sampling Design. (Procedural Level)	5	3,4
<b>3</b>	<b>Data Collection, Processing and Presentation</b>		<b>15</b>	
	3.1	Tools for Data Collection: Methods of Primary Data: Observation, Interview and Questionnaire/ Schedule; Structured vs. Unstructured and Participatory vs. Non-Participatory, The Pilot Survey, Reliability and Validity. (Procedural Level)	5	3,4
	3.2	Data Processing: Editing- Coding- Classification and Tabulation- construction of frequency table	3	3,4
	3.3	Statistical analysis of data – Central tendency, dispersion, association and relationship, hypothesis testing, tests of significance (overview only)	7	3,4
<b>4</b>	<b>Field Survey and Data Analysis in Practice</b>		<b>18</b>	

	4.1	Data Analysis: Descriptive Analysis – Inferential Analysis – computerized analysis and Presentation using a spreadsheet - Using Functions – Sum, Average, Max, Min, Count, Counta -Absolute, Mixed and Relative Referencing- Creating Simple Pivot Tables- Basic and Advanced Value Field Setting - Classic Pivot table - Choosing Field - Filtering PivotTables - Modifying PivotTable Data - Grouping based on numbers and Dates (Procedural Level) (Practical/hands-on Activity)	9	5,6
	4.2	Data Processing: Editing- Coding- Classification and Tabulation- Graphical representation– Graphs/charts/diagrams Report writing – types of reports, planning report writing, research report format, principles of writing, footnotes and bibliography. <b>Activity:</b> Conduct one field survey and submission of its Report. (internal evaluation only)	9	5,6
5	<b>Teacher Specific Module</b>			





<p><b>Teaching and Learning Approach</b></p>	<p><b>Suggested Classroom Procedure (Mode of transaction)</b></p> <p><b>CD1- Lecture-Based Instruction:</b> Conduct traditional lectures to introduce and explain concepts such as types and methods of scientific inquiry, the distinction between description and storytelling, and the significance of pure and applied research.</p> <p><b>CD2 - Case Study Analysis:</b> Understand real-world case studies to illustrate the application of exploratory, descriptive, diagnostic, evaluation, action research, experimental, analytical, historical, survey, and field study methods.</p> <p><b>CD3 - Group Discussions:</b> Facilitate group discussions to explore and compare primary and secondary data, discussing the factual implications at different levels.</p> <p><b>CD4 -. Interactive Workshops:</b> Conduct interactive workshops for understanding surveys, emphasizing characteristics, steps, purposes, and subject matter, with a focus on social and economic surveys.</p> <p><b>CD5 - Scientific study Proposal Development:</b> Engage students in practical exercises to develop study proposals, covering problem statements, objectives, hypotheses, conceptual models, and operational definitions.</p> <p><b>CD6 - Sampling Simulation:</b> Simulate sampling techniques through activities, discussing population and sample, census, purposive and non-purposive sampling, sample size, and various sampling procedures.</p> <p><b>CD7 - Role-Play for Data Collection Methods:</b> Use role-play scenarios for practicing observation, interview, and questionnaire/schedule methods, emphasizing structured vs. unstructured and participatory vs. non-participatory approaches.</p> <p><b>CD8 - Computer Labs:</b> Conduct hands-on labs for data processing, covering editing, coding, classification, tabulation, and the construction of frequency tables.</p> <p><b>CD9 -Statistical Software Training:</b> Provide training on statistical software for data analysis, including descriptive and inferential analysis, spreadsheet functions, and pivot table creation.</p> <p><b>CD10 - Practical Report Writing:</b> Assign practical report writing tasks to enhance understanding of the significance of report writing and the different steps involved.</p> <p><b>CD11 -Peer Review Sessions:</b> Organize peer review sessions for students to evaluate and provide feedback on each other's research proposals, survey designs, and reports</p>
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Assessment Types	MODE OF ASSESSMENT			
	A. Continuous Comprehensive Assessment (CCA) – 30 Marks			
	Particulars		Marks	
	Questionnaire and Sample Survey		10	
	Data tabulation and processing		10	
	Report writing and presentation		10	
	Total		30	
	B. Semester End examination			
	Written Examination (MCQ 10 marks and Written Answers 60 marks)			
	Descriptive type		Word Limit	Number of questions to be answered
Short Answer		50 words	5 out of 8	5 x 2 = 10
Short Essay		150 words	4 out of 7	4 x 5 = 20
Essays		450 words	2 out of 4	2 x 15 = 30
MCQ		NA	10	10 x 1 = 10
Total				70


### References

1. Kothari, C. R. (2004). Research Methodology: Methods and Techniques. New Age International.
2. Krishnaswami, O. R., & Ranganathan, M. (2014). Methodology of Research in Social Sciences. Himalaya Publishing House.
3. Panneerselvam, R. (2014). Research Methodology. PHI Learning Pvt. Ltd.
4. Kumar, R. (2019). Research Methodology: A Step-by-Step Guide for Beginners. Sage Publications.

5. Aggarwal, Y. P. (2017). *Research Methodology in Social Sciences*. APH Publishing Corporation.
6. Chakraborty, S. K. (2013). *Research Methodology: Methods and Techniques*. SAGE Publications India Pvt Ltd.

**Suggested Readings:**

1. Cohen, L., Manion, L., & Morrison, K. (2017). *Research Methods in Education*. Routledge.
2. Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.
3. Babbie, E. R. (2016). *The Practice of Social Research*. Cengage Learning.
4. Kumar, R. (2014). *Research Methodology: A Step-by-Step Guide for Beginners*. Sage Publications.
5. Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). *How to Design and Evaluate Research in Education*. McGraw-Hill Education.
6. Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill-Building Approach*. Wiley.
7. Leedy, P. D., & Ormrod, J. E. (2014). *Practical Research: Planning and Design*. Pearson.
8. Neuman, W. L. (2014). *Social Research Methods: Qualitative and Quantitative Approaches*. Pearson.
9. Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.
10. Robson, C. (2016). *Real World Research*. John Wiley & Sons.

<div>Est. in 1921</div> 	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Foundations of Economic Data Analysis</b>					
<b>Type of Course</b>	<b>DSE</b>					
<b>Course Code</b>	<b>UC7DSEECO401</b>					
<b>Course Level</b>	<b>400-499</b>					
<b>Course Summary</b>	This course is designed to provide students with fundamental data analysis skills in the field economic. Covering statistical methods and quantitative tools, it emphasizes hands-on applications such as data exploration, visualization, and interpretation. Students will learn to model economic trends, make predictions, and extract meaningful insights from datasets. The course equips them to contribute effectively to economic decision-making, market research, and policy formulation in an increasingly data-centric environment.					
<b>Semester</b>	<b>7</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learn ing Appr oach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	<b>Others</b>	
		<b>4</b>				<b>60</b>
<b>Pre- requisites, if any</b>	Attempting Economic Analytics -I is a prerequisite for this course. at least 50% of the classes should be engaged with the support of computer lab. A five day workshop is to be arranged for the teachers before launching the course.					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	understand some fundamental programming tools that can be used for economic data analysis.	U	1, 2, 3
2	analyse economic data using the techniques learnt in this course	An	2, 3, 9.10
3	evaluate the specific problem and apply relevant tools for the particular dataset	E	2, 3, 9.10
4	create simple analytical models making use of Python	C	2, 3, 9.10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Introduction to programming for economic analysis</b>		<b>10</b>	
	1.1	Economics and Programming: Importance of programming in Economics- Introduction to Excel, SAS, SPSS, EViews, Gretl, Stata, R and Python Software.	3	1
	1.2	Introduction to Python : Setting Up the Python-installing Python- Uses of Integrated Development Environments- IDLE, Jupyter, PyCharm , Spyder, Visual Studio Code and Atom.	2	2
	1.3	Economic variables in Python Syntax: Variable types, lists, tuples, sets, dictionaries.	2	3
	1.4	Basic computation and Structuring Objects: lists , tuple, sets, strings and dictionary methods.	3	3
<b>Practical:</b>	1. Setting up of the python environment. 2. Using Python for basic economic computation		8	
<b>2</b>	<b>Python syntax and objects</b>		<b>11</b>	

	2.1	Control Flow statements in Python: Conditional Statements- IF , ELIF and ELSE , Iteration statements-for and while, Break statements.	3	3
	2.2	Python functions in Economics : Importance, Inbuilt functions-user defined functions- function rules.	3	3, 4
	2.3	OOP in Python: Creating python objects-methods-building classes.	3	3, 4
	2.4	Introduction to Libraries: <i>NumPy, Pandas, Scipy, Scikit leran, statsmodels</i> -Methods for importing modules.	2	3, 4
<b>Practical:</b>	1. Using Control flow statements in economic scenarios. 2. Creating Economic functions in python.		7	
<b>3</b>	<b>Quantitative Economics in Python</b>		<b>12</b>	
	3.1	Quantitative Economics using Python I: Linear Algebra-vectors-matrices-Linear equations-Eigen vectors ad Eigen value.	3	3
	3.2	Economic Data visualisation in Python: Introduction to visualisation libraries- matplotlib- Bar graph, Line graph , Scatter plot, pie chart.	3	4
	3.3	Quantitative Economics using Python II: Introduction to Probability-mean-variance- Data distributions-use of random module.	3	
	3.4	Drawing Economic graphs using Python-Demand and Supply Curves-Costs Curves-other curves.	3	3, 4
<b>Practical:</b>	1. Visualising Economic concepts using python		5	
<b>4</b>	<b>Data Handling</b>		<b>12</b>	
	4.1	Data and Python: Data extraction - Different Data file formats- CSV, Doc , text and PDF file extraction.	3	3, 4
	4.2	Data Handling in Python: Data cleaning approaches - qualitative and quantitative-Introduction to Database management systems.	3	3, 4
	4.3	Working with Pandas <i>DataFrame</i> : Exploring Data- count, binning, minimum, maximum, mean, variance and sd- Inclusion and Exclusion of Columns.	3	3, 4
	4.4	Modelling in Python- Libraries for Regression – Implementing Economic Models-Growth Models.	3	3, 4

<b>Practicum</b>	1. Handling of missing data and outliers. 2. Regression Analysis using Python.	10	
<b>5</b>	<b>Teacher Specific Module</b>		



<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Classroom Lectures and Authentic Learning: Traditional lectures can provide the basics of data analysis. Practical session should be conducted for familiarising the various data analytic techniques.  <b>Suggested Course Delivery Methods</b> <ul style="list-style-type: none"><li>• CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>• CD2 - Tutorials/Assignments</li><li>• CD3 - Peer teaching</li><li>• CD4 – Lab sessions</li></ul>											
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Lab based exercises</td><td>20</td></tr><tr><td>Class tests</td><td>05</td></tr><tr><td>Assignments</td><td>05</td></tr><tr><td><b>Total</b></td><td><b>30</b></td></tr></table>	Particulars	Marks	Lab based exercises	20	Class tests	05	Assignments	05	<b>Total</b>	<b>30</b>	
	Particulars	Marks										
	Lab based exercises	20										
	Class tests	05										
	Assignments	05										
<b>Total</b>	<b>30</b>											
<b>B. Semester End examination</b> Written Examination												
<table><tr><th>Type</th><th></th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>MCQ</td><td>40</td><td>40 out of 50</td><td>40 x 1 = 40</td></tr><tr><td>Short Answer</td><td>50 words</td><td>15 out of 20</td><td>15 x 2 = 30</td></tr></table>	Type		Number of questions to be answered	Marks	MCQ	40	40 out of 50	40 x 1 = 40	Short Answer	50 words	15 out of 20	15 x 2 = 30
Type		Number of questions to be answered	Marks									
MCQ	40	40 out of 50	40 x 1 = 40									
Short Answer	50 words	15 out of 20	15 x 2 = 30									
<table><tr><td><b>Total</b></td><td><b>70</b></td></tr></table>	<b>Total</b>	<b>70</b>										
<b>Total</b>	<b>70</b>											




## Reference

1. Python for Data Analysis: Data Wrangling with pandas, NumPy, and Jupyter, Third Edition (Grayscale Indian Edition), Wes McKinney, Shroff/O'Reilly, 2022.
2. Fluent Python: Clear, Concise, and Effective Programming, Second Edition (Grayscale Indian Edition) Paperback, Luciano Ramalho, Shroff/O'Reilly 2022.
3. Learn Python Quickly: A Complete Beginner's Guide to Learning Python, Even If You're New to Programming, Code Quicky, 2020.
4. Python for Everybody: Exploring Data in Python 3, Charles Severance, Shroff Publishers
5. Data Analysis with Python: Introducing NumPy, Pandas, Matplotlib, and Essential Elements of Python Programming, Rituraj Dixit, 2022.
6. Python Data Analysis: Perform data collection, data processing, wrangling, visualization, and model building using Python, 3rd Edition, Avinash Navlani , Armando Fandango , et al., February 2021.
7. Data Analysis Using Python by Dr. Samitha Khaiyum, Prof. Rakshitha Kiran P, Good Writers Publishing, 2023.
8. Mastering Power BI, Chandraish Sinha, 2021.
9. Power Query for Power BI and Excel, Christopher Webb and Crossjoin Consulting Limited, Apress, 2014.
10. Power BI Data Modeling: Build Interactive Visualizations, Learn DAX, Power Query, and Develop BI Models, Nisal Mihiranga, 2022.
11. Microsoft Power BI Complete Reference: Bring your data to life with the powerful features of Microsoft Power BI, Devin Knight , Brian Knight, et al., Packt Publishing Limited, 2018.
12. Learning Microsoft Power BI: Transforming Data into Insights (Grayscale Indian Edition), Jeremy Arnold, Shroff/O'Reilly, 2022.

## Suggested Readings:

1. Practical Data Science with Jupyter, Prateek Gupta, 2021.
2. Power BI for Jobseekers: Learn how to create interactive dashboards and reports, and gain insights from the data, Alan Murray, 2023.

 <p>Est. in 1921</p>	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>	<b>BA (Hons) Economics</b>				
<b>Course Name</b>	<b>Contemporary Economic Policies</b>				
<b>Type of Course</b>	DSE				
<b>Course Code</b>	UC7DSEECO402				
<b>Course Level</b>	400-499				
<b>Course Summary</b>	This course provides an insight into the current economic policies and their enforcement significance. Economic policies both at the global and national levels are covered.				
<b>Semester</b>	7	<b>Credits</b>			4
<b>Course Details</b>	Learning Approach	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical</b>	<b>Others</b>
		4			
<b>Pre- requisites, if any</b>					

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the learner will be able to:</i>	Learning Domains *	PO No
1	Understanding the relevance of economic policy making in the context of diverse economic systems.	U	1, 2
2	Analysing the role of the state in promoting various sectoral development goals.	An	1, 2, 3
3	Evaluating the government policies with respect to different sectors in the dynamic and current context and analysing them	E	4, 5, 6

	with the global trends.		
4	Analysing the global scenario in frontier economic policies including that in technology and digital sectors.	An	9, 10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course Content	Hrs	CO No.
1		<b>An overview of economic policies and their categorization</b>	15	
	1.1	An introduction to economic policies: State as an economic agent and as the designer and implementor of economic policies and programmes-Role of the state in guiding economic activities and their relative importance in capitalist, mixed and centralized economies-Objectives of economic policies of the state: faster economic growth, economic stabilization structural change facilitation, managing external economic factors and social justice.	5	1
	1.2	Role of state in economic development and stabilization-Policies and programmes in the global context-China's economic governance and state intervention -Western approach to state intervention in the economy and recent policy interventions.	3	1

	1.3	Identification of the different economic policies usually designed by governments to realize various economic objectives: Industrial policy, commercial policy including IPRs, startup policy, and trade policy, agricultural policy, policy on foreign investment, policy on infrastructure, financial sector policies, public sector policies and tax policies (only an overview from the Indian context is needed).	3	1, 2
<b>2</b>		<b>Contemporary economic Policies -1</b>	<b>15</b>	
	2.1	Two vital ingredients of state policies-Fiscal policy and monetary policy: their use, significance and recent trends.	5	2, 3
	2.2	Industrial policies and state supports by various governments: Make in India-measures to support make in India-Make in China 2025-Chip Acts and other supportive measures to promote the interest of local entities by the US and Europe-EV Policy and the Semiconductor policy of India.	4	2, 3
	2.3	Food Security policy in India: MSP, Procurement, Buffer stock, PDS, Open market sale and export/import. Food Security and Public Stock holding: India and WTO.	5	2, 3
<b>3</b>		<b>Contemporary Economic Policies -2</b>	<b>15</b>	
	3.1	International economic governance, cooperation and policies: the Washington Consensus-Bretton woods System-Multilateral Bodies and their current role.	4	1, 4
	3.2	Multinational Corporations-Global Value Chains (GVCs)-Decoupling-Deglobalization and the recent shift in GVCs-freindshoring.	4	1, 4
	3.3	Trade partnership: Policy on FTAs -China ASEAN and RCEP-and India's higher FTA engagement with western countries-Policy to stop global black money and tax avoidance: the BEPS.	3	1, 4

	3.4	Promotion of an International Financial Centre in India: the GIFT IFSC-India's higher economic engagement with UAE and Singapore.	4	1, 4
	<b>4</b>	<b>Contemporary Economic Policies -3</b>	<b>15</b>	
	4.1	Tax policy: Taxes on corporate and taxes on individual: the messages of Laffer curve-tax concessions to corporates in recent years (tax competition)-DTAAs and the global action on tax havens.	3	1, 4
	4.2	Renewable Energy Policy-Approach to climate change and net zero targets-EU's CBAM-Green Energy-Policy on energy mix and energy security and energy transition in India.	3	1, 4
	4.3	Digital economy policies-Efforts to control the big tech-Promotion of digital enterprises and fin-techs-policy on digital public infrastructure-technology and tax compliance-technology and financial sector developments recent years.	3	1, 4
	<b>5</b>	<b>Teacher specific Module</b>		

<b>Teaching and Learning Approach</b>	<b>Suggested Classroom Procedure (Mode of transaction)</b>  <b>CD 1- Lecture-Based Instruction</b> <b>CD 2 - Case Study Analysis</b> <b>CD 3 - Group Discussions</b> <b>CD 4 -. Assignments</b> <b>CD 5 – Debates</b>
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Assessment Types	MODE OF ASSESSMENT																								
	MODE OF ASSESSMENT																								
	A. Continuous Comprehensive Assessment (CCA) – 30 Marks																								
	<table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Assignment</td><td>10</td></tr><tr><td>Mini Project</td><td>10</td></tr><tr><td>Report writing and presentation</td><td>10</td></tr><tr><td>Total</td><td>30</td></tr></table>			Particulars	Marks	Assignment	10	Mini Project	10	Report writing and presentation	10	Total	30												
	Particulars	Marks																							
	Assignment	10																							
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	Total	30																							
	B. Semester end examination																								
<table><tr><th>Descriptive type</th><th>Word Limit</th><th>Number of questions to be answered</th><th>Marks</th></tr><tr><td>Short Answer</td><td>in 50 words</td><td>5 out of 8</td><td>5 x 2 = 10</td></tr><tr><td>Short Essay</td><td>150 words</td><td>4 out of 7</td><td>4 x 5 = 20</td></tr><tr><td>Essays</td><td>450 words</td><td>2 out of 4</td><td>2 x 15 = 30</td></tr><tr><td>MCQ</td><td>NA</td><td>10</td><td>10 x 1 = 10</td></tr><tr><td colspan="3">Total</td><td>70</td></tr></table>	Descriptive type	Word Limit	Number of questions to be answered	Marks	Short Answer	in 50 words	5 out of 8	5 x 2 = 10	Short Essay	150 words	4 out of 7	4 x 5 = 20	Essays	450 words	2 out of 4	2 x 15 = 30	MCQ	NA	10	10 x 1 = 10	Total			70	
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Total			70																						

### References


1. Allen, Robert C. "Global Economic History: A Very Short Introduction." Oxford University Press, 2011.
2. Acemoglu, Daron, and Robinson, James A. "Why Nations Fail: The Origins of Power, Prosperity, and Poverty." Crown Publishers, 2012.
3. Dasgupta, Partha. "Economics: A Very Short Introduction." Oxford University Press, 2007.

4. Sharma, Ruchir. "The Rise and Fall of Nations: Forces of Change in the Post-Crisis World." W.W. Norton & Company, 2016.
5. Banerjee, Abhijit V., and Duflo, Esther. "Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty." PublicAffairs, 2011.
6. Piketty, Thomas. "Capital in the Twenty-First Century." Harvard University Press, 2014.
7. Rajan, Raghuram. "The Third Pillar: How Markets and the State Leave the Community Behind." Penguin Press, 2019.
8. Reinhart, Carmen, and Rogoff, Kenneth. "This Time Is Different: Eight Centuries of Financial Folly." Princeton University Press, 2009.
9. Rodrik, Dani. "The Globalization Paradox: Democracy and the Future of the World Economy." W.W. Norton & Company, 2011.

### **SUGGESTED READINGS**

1. Joshi, Vijay. "India's Long Road: The Search for Prosperity." Oxford University Press, 2016.
2. McMillan, John. "Reinventing the Bazaar: A Natural History of Markets." W.W. Norton & Company, 2002.



<div>Est. in 1921</div> 		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>		<b>BA (Hons) Economics</b>					
<b>Course Name</b>		<b>Artificial Intelligence and the Economy</b>					
<b>Type of Course</b>		<b>DSE</b>					
<b>Course Code</b>		<b>UC7DSEECO403</b>					
<b>Course Level</b>		<b>400-499</b>					
<b>Course Summary</b>		This course explores the transformative impact of artificial intelligence (AI) on the economy, offering students a comprehensive understanding of how AI technologies are reshaping various sectors. Through a blend of theoretical foundations and practical case studies, students will examine AI's influence on productivity, employment, market dynamics, and economic policies. The curriculum also touches the ethical considerations and economic challenges posed by rapid technological advancement, equipping students with a foundational level knowledge to evaluate AI's potential and risks. By the end of the course, students will be able to articulate informed perspectives on AI's role in future economic landscapes and its implications.					
<b>Semester</b>		7	<b>Credits</b>			4	Total Hours
			<b>Lecture</b>	<b>Tutorial</b>	<b>Practical/Practicum</b>	<b>Others</b>	
<b>Course Details</b>	Learning Approach	4					60
<b>Pre-requisites, if any</b>							




## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the learner will be able to:</i>	Learning Domains *	PO No
1	Understand the role of AI in enhancing productivity in various sectors of the economy.	U	1, 3
2	Analyse the areas and sectors in which AI helps the various tasks to be completed.	A	4, 5
3	Understand the influence of AI in Economics and Finance.	U	9, 10
4	Evaluate the impact of AI on the labour market and the various macroeconomic effects it produces.	E	8, 9, 10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course Content	Hrs	CO No.
1		Introduction to AI	15	
	1.1	The role of technological progress in economic development- productivity expansion -Solow's residual and the concept of productivity.	5	1, 4
	1.2	Artificial intelligence as a technological revolution-Basics of Artificial Intelligence – Artificial intelligence: meaning, nature and evolution-Development of neural networks-Turing Test-Advent of machine learning-Significance of large language models and GPT.	5	3, 4
	1.3	AI basic concepts: Difference between AI, Machine learning and robotics-Difference between narrow AI, general AI and super-intelligent AI.	5	3

<b>2</b>		<b>Popular Applications of AI</b>	<b>15</b>	
	2.1	Industrial sector applications of AI: Automation and robotics, automated decision making, predictive analytics, supply chain optimization and quality control systems.	5	2, 3
	2.2	AI applications in business: Customer Relationship Management (CRM), Marketing automation, Business intelligence and Analytics and Human Resource Management.	5	2, 4
	2.3	AI in other sectors: Education: Adaptive and personalized e-learning-Governance: AI in public administration-Infrastructure including transportation and smart cities-Health: AI based Diagnosis-Consumer segment: Personal assistants and smart home devices.	5	3, 4
				

<b>3</b>		<b>Applications of AI in Economics and Finance</b>	<b>15</b>	
	3.1	Applications of AI in economics: Predictive modelling, forecasting, behavioural economics, natural language processing to analyse economic data, news etc.	5	1, 2
	3.2	Use of AI in Sentiment Analysis/Behavioural Economics: Steps of sentiment analysis: Data collection, pre-processing, feature extraction, model training, sentiment classification and analysis and reporting.	5	1, 3
	3.3	Use of AI in finance: Algorithmic trading, fraud detection, credit scoring systems, financial advising and management.	5	3, 4
	<b>4</b>	<b>Other economic issues related with AI</b>	<b>15</b>	

	4.1	AI labour market implications – Implications of AI on the job market-AI as a task fulfilment technology-AI as a labour replacement technology-AI and skill bias-AI based startups.	5	1, 2
	4.2	AI regulation-GPAI-OECD and G20 initiatives-UNICRI Centre for AI and Robotics-ethical issues related with AI.	5	1, 3
	4.3	Economic implications of AI-AI and inequality-AI favours big tech companies-the Magnificent seven and their role in the development of AI-Big tech, AI and the power of network effects.	5	1, 4
	Assignment: Leading AI applications developed by the big tech and their market effects.			
	5	Teacher specific Module		

Teaching and Learning Approach	<p><b>Suggested Classroom Procedure (Mode of transaction)</b></p> <p><b>Artificial intelligence is a rapidly transforming area. Any syllabus that covers the impact of AI on any fields of life including economic and social should touch the basics of AI as well. Still, given the elementary nature of a rapidly evolving</b></p> <p><b>CD 1- Lecture-Based Instruction:</b> The lecture format for explaining the progressing AI and its impact on the various aspects of Economy and Business.</p> <p><b>CD 2 - Case Study Analysis:</b> For the understanding of AI, updated content based on case study can be adopted. Here, case study of any large language model on work or task can be analysed.</p> <p><b>CD 3 - Group Discussions:</b> Promote group discussions on emerging topics and current developments related to AI and its economy effects.</p> <p><b>CD 4 -. Presentations based on leading articles:</b> the impact of AI will be covered by prominent articles and research works. Such academic and analytical works can be presented in the class to nudge updates on the topics.</p> <p><b>CD 5 -Mapping and Simulations:</b> The AI is producing new types of task fulfilments and new types of enterprises that exploits technology driven business opportunities. Prepare mapping of such sub industrial and services sectors where AI is ambushing the traditional sectors.</p> <p>355</p>
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Assessment Types	MODE OF ASSESSMENT			
	MODE OF ASSESSMENT			
	A. Continuous Comprehensive Assessment (CCA) – 30 Marks			
	Particulars		Marks	
	Assignment		10	
	Mini Project		10	
	Report writing and presentation		10	
	Total		30	
	B. Semester end examination			
	Descriptive type		Word Limit	Number of questions to be answered
Short Answer		50 words	5 out of 8	5 x 2 = 10
Short Essay		150 words	4 out of 7	4 x 5 = 20
Essays		450 words	2 out of 4	2 x 15 = 30
MCQ		NA	10	10 x 1 = 10
Total				70

### References

1. The Economics of Artificial Intelligence: An Agenda, Ajay Agrawal, Joshua Gans, Avi Goldfarb, NEBER, 2019.
2. Mitchell, Melanie. Artificial Intelligence: A Guide for Thinking Humans. Farrar, Straus and Giroux, 2019.
3. Agrawal, Ajay, Gans, Joshua, and Goldfarb, Avi. Prediction Machines: The Simple Economics of Artificial Intelligence. Harvard Business Review Press, 2018.
4. Bootle, Roger. The AI Economy: Work, Wealth and Welfare in the Robot Age. Nicholas Brealey Publishing, 2019.
5. O'Neil, Cathy. Weapons of Math Destruction: How Big Data Increases Inequality and

Threatens Democracy. Crown, 2016.


6. Autor, David. "Why Are There Still So Many Jobs? The History and Future of Workplace Automation." *Journal of Economic Perspectives*, vol. 29, no. 3, Summer 2015, pp. 3-30.
7. Aghion, Philippe, Jones, Benjamin F., and Jones, Charles I. "Artificial Intelligence and Economic Growth." In *The Economics of Artificial Intelligence: An Agenda*, edited by Ajay Agrawal, Joshua Gans, and Avi Goldfarb, University of Chicago Press, 2019, pp. 237-282.
8. Cockburn, Iain, Henderson, Rebecca, and Stern, Scott. "The Impact of Artificial Intelligence on Innovation." NBER Working Paper No. 24449, National Bureau of Economic Research, March 2018.
9. McKinsey Global Institute. "Artificial Intelligence: The Next Digital Frontier?" McKinsey & Company, June 2017.
10. Bessen, James. "AI and Jobs: The role of demand." *Labour Economics*, vol. 70, April 2021, pp. 10197.
11. Future of Humanity Institute. "Governance of AI." Oxford University, accessed 2023. <https://www.fhi.ox.ac.uk/research/research-areas/artificial-intelligence/>

### **Suggested Readings**

1. AI & Society - <https://link.springer.com/journal/146>
2. The Journal of Artificial Intelligence Research - <https://www.jair.org/>
3. The future of Life org [www.thefutureoflife.org](http://www.thefutureoflife.org)
4. The OECD AI Observatory: <https://oecd.ai/en/>

## Semester - 8



<div>Est. in 1921</div> <div></div>		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>		<b>BA (Hons) Economics</b>					
<b>Course Name</b>		<b>Indian Economy – II</b>					
<b>Type of Course</b>		<b>DCC</b>					
<b>Course Code</b>		<b>UC8DCCECO400</b>					
<b>Course Level</b>		<b>400-499</b>					
<b>Course Summary</b>		This course is designed to acquaint the students with different aspects of Indian economy. The policy issues and measure to understand economic initiatives for improving economic development and growth, agriculture and industry, planning of the different sectors of the economy and the place of Indian economy in the international level particularly after economic reforms and covered. This will sharpen the analytical capacity of the students to understand the performance of different sections of contemporary Indian economy.					
<b>Semester</b>		8	Credits			4	Total Hour s
<b>Course Details</b>	<b>Learning Approac h</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	<b>Other s</b>		
		3		2		75	
<b>Pre-requisites, if any</b>							

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, the learner will be able to:	Learning Domains *	PO No
1	compare the macroeconomic variables of the Indian Economy with other economies of the world.	An	1,2
2	evaluate major policies and trends in various fields like Agriculture, Industry and Services.	E	2, 3, 4, 5, 7,10
3	learn the leading development issues related with Indian Economy.	E	1, 2, 3, 7,10
4	analyze the sector specific policies adopted for achieving the rational goals.	An	1, 2, 3, 6, 7,10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
	<b>1</b>	<b>Macroeconomics developments</b>	<b>15</b>	<b>1</b>
	<b>1.1</b>	Indian Economy: Macroeconomic performance in recent years-Structural transformation trends and challenges–Avoiding premature deindustrialization.	5	
	<b>1.2</b>	Comparison of India's GDP, Per capita income and HDI trends with major other economies (US, China, South Korea, UK, Germany, Vietnam etc.)-Strategy for avoiding the middle-income trap.	5	
	<b>1.3</b>	Education and health sector challenges and policies by the government to overcome them-Multidimensional poverty and its incidence in India-Interstate and interregional differences in India's economic development.	5	



		Practicum: 1. Compare India's economic transformation vis a vis major other economy by using GDP and GDP per capita income indicators (10). Practicum 2. Elaborate the incidence of poverty in India.	10	3
2	2	<b>Agriculture and Industry and Services</b>	15	2
	2.1	Agriculture: Current trends in Indian Agriculture-Agricultural price policy in India-MSP and its significance-Agricultural Credit-Agricultural Marketing-Challenges of climate change-WTO's AoA and India's Agricultural Sector-Public stockholding of food grains and India's stand.	3	
	2.2	Performance of the industrial sector in the post reform period-Government initiatives to rejuvenate the industrial sector-Significance of IBC-MSME Policy and support measures-Infrastructure expansion in recent years-Fourth industrial revolution and India.	5	
	2.3	Climate change and India's net zero target and initiatives-Panchamrit-Renewable energy strategy-Balancing India's development goals and climate commitments.	4	
	2.4	Service sector and economic transformation of India-Challenges and opportunities of new technologies including AI- Global big tech companies, digital economy, and their impact on indian economy-Inclusive growth and government policies.	3	
		Practicum 1. Elaborate the role of India's service sector in GDP, sectoral transformation and international trade. Practicum 2: Discuss the various programmes launched by the government towards emission reduction and energy transition.	10	3,4
	3	<b>Monetary policy, Financial Sector and Fiscal Policy</b>	15	3, 4
	3.1	Evaluation of RBI's monetary policy -Inflation targeting in India-Trends and progress of banking in India-Role and performance of NBFCs-Fintech, digital finance, and the challenges-Financial inclusion in India-Digital payment system in India.	7	
	3.2	Fiscal policy challenges in India-the FRBM Act-Fiscal Consolidation-Major features of GST-Current Finance Commission and apprehensions of progressive states including Kerala-Role of the public sector-Evaluation of the disinvestment policy.	8	

	3.3	Practicum 1: Chart the various components of India's digital payment system. Practicum 2: Discuss the different types of NBFCs in India.	10	
	<b>4</b>	<b>Foreign Trade and Investment</b>	<b>15</b>	<b>4</b>
	4.1	India and Free Trade Agreements-India's major demands in the WTO-India's rise as a service (invisibles) trading economy-India and the IMF.	9	
	4.2	Different sources of foreign capital in India-Capital Account Convertibility (CAC) in India- FDI Policy.	6	
		<b>Activity/Practicum- Suggestions:</b> <ul style="list-style-type: none"> <li>· Mini project ascertain the impact of pandemic on lives of different sections of people</li> <li>· Submit your ideas for the vision of India @2047</li> <li>· Assignment on Welfare programmes in recent Union budget</li> </ul>		
<b>5</b>	<b>Teacher specific Module</b>			


<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> <b>CD1- Lecture-Based Instruction:</b> Lecture classes on the various leading issues related with Indian economy. <b>CD2 - Case Studies:</b> Case study related various issues like productivity and production trends in agriculture, food security issues, MSP etc. <b>CD3 - Group Discussions:</b> Problems of poor structural changes, human development issues, <b>CD4 -. Interactive Workshops:</b> Challenges of Fourth Industrial Revolution, Fiscal policy issues etc.					
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b> <table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Assignment</td><td>10</td></tr></table>		Particulars	Marks	Assignment	10
Particulars	Marks					
Assignment	10					

	Group Discussion	10		
	Report writing and presentation	10		
	<b>Total</b>	<b>30</b>		
	<b>B. Semester End examination</b>			
	Written Examination (MCQ 10 marks and Written Answers 60 marks)			
	<b>Descriptive type</b>	<b>Word Limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	4 out of 7	4 x 5 = 20
	Essays	450 words	2 out of 4	2 x 15 = 30
	MCQ	NA	10	10 x 1 = 10
	<b>Total</b>			<b>70</b>

### **References**

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		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>		<b>BA (Hons) Economics</b>				
<b>Course Name</b>		<b>Development Economics – II</b>				
<b>Type of Course</b>		<b>DCC</b>				
<b>Course Code</b>		<b>UC8DCCECO401</b>				
<b>Course Level</b>		<b>400 – 499</b>				
<b>Course Summary</b>		<p>This course offers a comprehensive exploration of theoretical paradigms in economic development. It addresses the demands of a rapidly evolving global economy by integrating interdisciplinary perspectives, incorporating cultural, political, and social dimensions. Despite its interdisciplinary nature, the course grounds students in the logic and theoretical framework of standard economic analysis. Objectives include familiarizing students with conceptual routes, theoretical dynamics, and practical strategies for growth and development. The course aims to orient students toward major development themes, encourage systematic inquiry, and equip them with analytical knowledge. Ultimately, students should critically evaluate growth theories, demonstrate understanding of recent literature on underdevelopment and growth, and assess results related to development issues.</p>				
<b>Semester</b>		<b>8</b>	<b>Credits</b>			<b>Total Hours</b>
<b>Course Details</b>			<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	
	<b>Learning Approach</b>	3		2		75
<b>Pre-requisites, if any</b>		<p>Understanding the concepts of economic development, its measurement, core values of development, and views of Adam Smith, Ricardo, Schumpeter, Rostow, and balanced and unbalanced growth theories, poverty, inequality, and their measurement.</p>				

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	analyse and critically evaluate theories of underdevelopment.	An, E, I	1,2,8,6,10
2	acquire competency in developing growth models.	C, S,	1, 8,6,5
3	evaluate development approaches critically.	Ap, An, E, S	2,8,6,5
4	assess and develop policies for the implications of population growth in economic development	E, A, An, S, C, I,	1,2,8,6
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1		<b>Theories of Underdevelopment</b>	19	
	1.1	Dualistic Theories. – Social – Financial and Technical Dualism-Prebisch- Singer thesis and Myrdal thesis--Stable Theory –the Dutch Diseases.	8	1
	1.2	Rural-urban migration and urban unemployment (Harris-Todaro model)	2	1
	1.3	Theory of dependency- Paul Baran, Gundar Frank, Samir Amin and Emmanuel Wallerstein (World systems approach).	5	1
Practicum		Research and analyze alternative theories to dualism that explain economic development patterns in developing countries. Explore theories that emphasize market failures, institutional weaknesses, or geographical factors.	4	
2		<b>Growth Models</b>	19	

	2.1	Harrod-Domar Model.	2	2
	2.2	Neo-Classical Growth Models – Solow and Meade.	3	2
	2.3	Cambridge Growth Models: Mrs. Joan Robinson's	2	2
	2.4	Kaldor's Growth Models.	2	2
	2.5	Endogenous Growth Models: (Romer model, AK model, Arrow's Model )	6	2
Practicum		Explore the contributions of Joan Robinson	4	
<b>3</b>	<b>Approaches to Development</b>		18	
	3.1	Theory of Big Push- Critical Minimum Effort Thesis- Low Income Equilibrium Trap.	5	3
	3.2	Lewis model-, Ranis and Fei Model - Michael Kremer's O-Ring Theory of Economic Development-- The Jorgenson model and Dixit-Marglin model.	9	3
	3.3	Globalization and Development: Views of Stiglitz.	1	3
Practicum		Research case studies of developing countries that have experienced success or failure in the context of globalization.	3	

		Analyze these cases through a Stiglitzian lens, considering factors like market failures, institutional weaknesses, and policy choices.		
<b>4</b>	<b>Population Growth and Economic Development</b>		19	
	4.1	Economic theories of population growth (Malthus model, Optimum theory of population)	4	4
	4.2	Theories of resource constraint on Economic growth: Malthus to the Club of Rome, the Ricardo model and the dual economy model	4	4
	4.3.	Harris Todaro Model of Urban Migration;	2	4
	4.4.	Interrelation between population, development and environment; sustainable development	3	4
	4.5	Population as 'Limits to Growth' and as 'Ultimate Source'	2	4
Practicum		Define the demographic transition model and identify the stage India is currently in. Discuss how India's demographic transition might influence its economic development trajectory.	4	
<b>5</b>	<b>Teacher Specific Module</b>			



<b>Teaching and Learning Approach</b>	<b>Suggested Classroom Procedure (Mode of transaction)</b> <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Class Debates and Discussions on Development Approaches</li> <li>• Utilize real-world case studies to illustrate dualistic theories</li> <li>• Organize class debates or discussions to critically assess and apply development approaches</li> <li>• Arrange guest lectures or panel discussions featuring experts or practitioners to share insights on real-world perspectives.</li> <li>• Assign critical analysis assignments on globalization and development, incorporating diverse views including those of Stiglitz</li> <li>• Assign research projects exploring economic theories of population growth, theories of resource constraints</li> <li>• Enhance understanding by incorporating multimedia presentations, videos, and documentaries related to the syllabus content.</li> <li>• Assign critical analysis assignments on the role of population as 'Limits to Growth' and the 'Ultimate Source.' Encourage students to explore different viewpoints and present well-reasoned arguments.</li> </ul>												
<b>Assessment Types</b>	<p><b>MODE OF ASSESSMENT</b></p> <p><b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b></p> <table border="1" data-bbox="451 1058 1276 1482"> <thead> <tr> <th>Particulars</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>Class Tests</td><td>15</td></tr> <tr> <td>Assignments</td><td>5</td></tr> <tr> <td>Seminar/Viva</td><td>5</td></tr> <tr> <td>Project/Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr> <tr> <td><b>Total</b></td><td><b>30</b></td></tr> </tbody> </table>	Particulars	Marks	Class Tests	15	Assignments	5	Seminar/Viva	5	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	<b>Total</b>	<b>30</b>
Particulars	Marks												
Class Tests	15												
Assignments	5												
Seminar/Viva	5												
Project/Practicum/Quiz/Book Review/Fieldwork etc.	5												
<b>Total</b>	<b>30</b>												

	<b>B. Semester End examination</b> <b>Written Examination (MCQ 10 marks and Written Answers 60 marks)</b>			
	<b>Descriptive Type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	4 out of 7	4 x 5 = 20
	Essays	450 words	2 out of 4	2 x 15 = 30
	MCQ	NA	10	10 x 1 = 10
	<b>Total</b>			<b>70</b>



## References


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2. Behrman, S., & Sreenivasan, T. N. (Eds.). (n.d.). Handbook of Economics Development, Vol. 3. Elsevier Amsterdam.
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### **Suggested Readings**

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2. Banerjee, Abhijit V. and Esther Duflo (2007). The Economic Lives of the Poor. *Journal of Economic Perspectives*, 21 (1): 141-168.
3. Acemoglu, Daron, Simon Johnson, and James A. Robinson (2001). The Colonial Origins of Comparative Development: An Empirical Investigation. *American Economic Review*, 91 (5), 1369-1401.



<div>Est. in 1921</div> <div></div>		<div>UNION CHRISTIAN COLLEGE, ALUVA</div>					
Programme		BA (Hons) Economics					
Course Name		Economics of Innovation and Technological Change					
Type of Course		DCE					
Course Code		UC8DCEECO400					
Course Level		400-499					
Course Summary		This course is designed to provide an insight into the leading technological developments that are influencing economic progress. Across the world, with the march of the fourth industrial revolution, life and work are heavily conditioned by new technologies especially in the digital field like AI, Automation, 3D printing, robotics, quantum computing etc. Economies, entities and technical people who embraced these advancements are able to get higher economic rewards. In this context, the current course is designed to analyse these frontier developments from an economics perspective. The module on MSMEs is added here so that the students get an idea about the startup procedures and environment of small business in India.					
Semester		8	Credits			4	Total Hours
Course Details		Lear ning Appr oach	Lecture	Tutorial	Practical/  Practicum	Others ()	
			3		2		75
Pre-requisites, if any							

## COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the learner will be able to:</i>	<b>Learning Domains *</b>	<b>PO No</b>
1	understand the role of entrepreneurship in economic development.	U	1, 3
2	analyse the nature of current technological progress.	An	2, 6, 10
3	examine the relationship between economic development and technological progress.	E	3, 5, 10
4	examine the new technologies and their impact on the labour market and industrial sector transition.	E	3,10
5	assess the role of the state in promoting technological progress and development.	A	3, 4, 10
6	evaluate the productivity expansion effect of new technologies.	E	9, 10
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

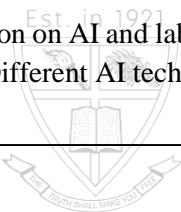
## **COURSE CONTENT**

### **Content for Classroom transaction (Units)**

<b>module</b>	<b>Units</b>	<b>Course Description</b>	<b>Hrs</b>	<b>Co No.</b>
<b>1</b>		<b>The Macroeconomics of Innovation, Technological Progress and Structural Change</b>	<b>5</b>	
1	1.1	Role of innovation in economic development-Schumpeter theory of development-Role of entrepreneurs-Creative destruction and Disruptive Innovation.	4	3
	1.2	Types and relevance of intellectual property-IPRs and economic development	3	5
	1.3	Convergence and catching up in the global economy- Connection between scientific progress and economic development-knowledge economy.	3	5
	1.4	Macroeconomics of innovation and structural change-Fourth industrial revolution and new technologies- Use of Government (industrial) policies and funds to promote scientific and industrial development in recent years: Make in India - Chips Act of the US and the EU and Made in China 2025.	5	3


	<b>Practicum</b> <ol style="list-style-type: none"> <li>1. Prepare the list of countries and policies that designed to promote technological change and innovation domestically.</li> <li>2. Explore the strategic significance of semiconductor industry in driving fourth industrialisation.</li> <li>3. Map out how Asian countries like China are catching up with advanced countries.</li> <li>4. Prepare an overview of the various government initiatives to promote fourth industrialisation across the world in recent years.</li> <li>5. Discussion on the rise of China, South Korea, Japan and Germany as industrial powerhouses.</li> </ol>	0	



	<b>2</b>	<b>Technological progress and productivity expansion</b>		<b>5</b>
	2.1	Relationship between technological progress, industrialisation and 3		
	2.2	3 output expansion-Technical progress function and total factor productivity (Solow/Swan).		
	2.3	Current Technological Developments-Internet of Things, Robotics, 3D 5		
	2.4	5 printing, Artificial Intelligence-Economic significance of connected devices.		
	2.5	AI and productivity growth - Economic impact and challenges of 3		
	2.6	6 machine learning, natural language processing and automation.		
	2.7	AI: Implications for the future of work- labour market effects - Luddite 4		
	2.8	5 fallacy - Ethical considerations in AI and biotechnology - GPAI.		
	<b>Practi cum</b>	1. Group Discussion on AI and labour market effects. 2. Mini Project: Different AI technologies and their use in the various fields.	0	
				
3	<b>Leading issues in technological progress and economic development</b>		<b>15</b>	
	3.1	Developments in digital payments - Blockchain technology and its uses - Crypto currency: money and asset nature-Regulatory issue-Digital	4	5
	3.2	Public Infrastructure in India. Green and Circular Economy for saving the planet - Energy transition: 3		4
	3.3	Challenges and prospects.		
	3.4	Space economics: Economic benefits of space programmes - Private 4		3
	3.5	sector in space - India as a global space power-Space startup.		

	3.6	International trade in technology -Technological decoupling between 4			5
	3.7	US and China - Global inequality in technological progress.			
	<b>Practicum</b>	1. Prepare schematic assignment showing the benefits of Energy 7 Transition using different energy sources. 2. Examine the economic impact of the technological decoupling between the US and China. 3. Arrange a group discussion on the role of the private sector and startups in the space sector.			
3	<b>The MSME landscape and supportive measures.</b>		<b>15</b>		
4.1	MSMEs -definition-scope-employment and export orientation.		3	5	
	4.2	Formation of MSMEs- Udyog Aadhaar Registration- PMEGP- 4 4 MUDRA-Yojana- CGTMSE- MSE-CDP-ESDP.			
	4.3	Institutional support for MSMEs-Role of Ministry of MSMEs and 4			3
	4.4	SIDBI.			
	4.5	NSIC, SIDC, KVIC and SFRUTI-Startup India and Standup India 4			5
	4.6	Schemes-SMERA.			
5	<b>Practicum</b>	Prepare a draft business plan for starting an MSME		3	
	<b>Teacher Specific Module</b>				



<b>Teaching and Learning Approach</b>	<p><b>Classroom Procedure (Mode of transaction)</b></p> <p><b>CD 1- Lecture-Based Instruction:</b> Traditional lectures to introduce and explain basic concepts such as innovation, IPRs as intangible assets, disruptive innovation, structural change etc. Integrate technological change under the concept of economic development.</p> <p><b>CD 2 - Case Studies:</b> Bring the topics in the context of the real-world developments that overlaps technological and economic areas. For example, the fund of the funds created by China and several other similar initiatives by the US and Europe can be examined. Leading developments in AI and Automation can be contextualised. The significance of TSMC, the need for AI chips for next generation computing etc. can be brought for case studies.</p> <p><b>CD 3 - Group Discussions:</b> Promote group discussion on topics such as chip war, technological decoupling etc.</p> <p><b>CD 4: Enabling students to have practical familiarisation:</b> Instruct students to prepare an action map for launching an MSME including product identification, technological adaptation, securing funds, registration and marketing.</p>
<b>Assessment Types</b>	<div data-bbox="716 947 899 1157"> <p>Est. in 1921</p>  </div>

**MODE OF ASSESSMENT****A. Continuous Comprehensive Assessment (CCA)****(1) Formative Assessment (FA)**

Assessment type	Number	Marks for one assessment	Total Marks
Assignment	2	2	10
Total Marks			10

**(2) Summative Assessment (SA)**

Assessment type	Number	Marks for one assessment	Total Marks
Presentation	1	10	10
Case Study Report	1	10	10
Total Marks			20
Grand Total of CCA (1+2)			30

**B. Semester End examination**

(As per University Regulations).

**A. Semester End examination****Written Examination (MCQ 10 marks and Written Answers 60 marks)**

Descriptive type	Word Limit	Number of questions to be answered	Marks
Short Answer	50 words	5 out of 8	5 x 2 = 10
Short Essay	150 words	4 out of 7	4 x 5 = 20


		Essays	450 words	2 out of 4	2 x 15 = 30
		MCQ	NA	10	10 x 1 = 10
		Total			70

### References

1. The Economics of Artificial Intelligence: Implications for the Future of Work, ILO future of work research paper series, International Labour Office, Geneva, ILO, 2018.
2. The Economics of Artificial Intelligence, Ajay Agrawal, Gans Joshua and Avi Goldfarb, Oxford University Press, 2019.
3. Economic Impacts of Artificial Intelligence (AI), European Parliamentary Research Service, July 2019.
4. Technology, Innovations and Economic Development, Lakhwinder Singh, SAGE India, 2015.
5. Intellectual Property Rights, Development, and Catch Up: An International Comparative Study, Hiroyuki Odagiri et al, Oxford University Press, 2012.
6. The Economic Rise of East Asia: Development Paths of Japan, South Korea, and China, Linda Glawe, Helmut Wagner, Springer 2022.
7. Fourth Industrial Revolution, Klaus Schwab, Portfolio Penguin, 2017.
8. The Solow Model of Economic Growth: Application to Contemporary Macroeconomic Issues (Routledge Studies in Economic Theory, Method and Philosophy), Pawel Dykas, Rafal Wisla, Tomasz Tokarski, Routledge, 2022.
9. The Space Economy: Capitalize on the Greatest Business Opportunity of Our Lifetime The Space Economy: Capitalize on the Greatest Business Opportunity of Our Lifetime, Anderson, John Wiley & Sons Inc, 2023.
10. Crypto Currencies and Blockchain: The Future of Money, Jayashree Patil-Dake, Ms. Archana Yadav Kaklij, Xoffencer, 2023.
11. Blockchain & The Space Economy, Samson Williams, George Pullen, Book Series, 2022.
12. The Great Decoupling: China, America and the Struggle for Technological Supremacy, Nigel Inkster, C Hurst & Co Publishers Ltd, 2023.

### Suggested Readings

1. Technology and Inequality: Concentrated Wealth in a Digital World, Jonathan P. Allen, Palgrave Macmillan, 2017.
2. Chip War: The Fight for the World's Most Critical Technology, Chris Miller, Scribner, 2022.

 <p>Est. in 1921</p>	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>				
<b>Programme</b>	<b>BA (Hons) Economics</b>				
<b>Course Name</b>	<b>Mathematical Economics – II</b>				
<b>Type of Course</b>	<b>DCE</b>				
<b>Course Code</b>	<b>UC8DCEECO401</b>				
<b>Course Level</b>	<b>400-499</b>				
<b>Course Summary</b>	The course is designed to equip students with the necessary skills to understand mathematical modelling of dynamic problems. The course introduces to the student the fundamental concepts of differential and difference equations and the basic methods to address dynamics in economics.				
<b>Semester</b>	8	<b>Credits</b>			<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	<b>Others</b>
		3		2	
<b>Pre-requisites, if any</b>	Mathematical Economics - I or Quantitative Techniques - III				

#### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the students will be able to:</i>	<b>Learning Domains *</b>	<b>PO No</b>
1	Understand how dynamic problems in economics can be modelled mathematically	U	1,2

2	Understand the fundamental concepts of differential and difference equations and their solutions.	U	2
3	Understand some of the fundamental applications of differential and difference equations in economics.	U	1
4	Apply methods to solve first order differential and difference equations in the context of economic problems.	Ap	2
5	Evaluate economic problems and create simple dynamic models	C	1,2
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

## COURSE CONTENT

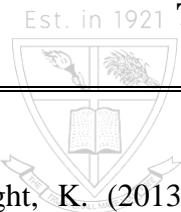
### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Differential Equations</b>		<b>27</b>	
	1.1	Meaning and concepts, order and degree, solution	2	<b>1</b>
	1.2	First order linear differential equations: with constant coefficient and constant term (homogeneous and non-homogeneous) – verification of the solution, with variable coefficient and variable term(homogeneous and non-homogeneous)	6	1,2
	1.3	Exact differential equations and partial integration, integrating factors and rules for the integrating factor, separation of variables	9	1,2
	1.4	Phase diagrams for differential equations	2	1,2
	1.5	Higher Order differential equations(concept only)	2	1
	Practicum	Discuss on the relevance of order and degree and solution Discuss on about first order linear differential equations and different types of integration	6	
<b>2</b>	<b>Applications of differential equations in economics</b>		<b>15</b>	

	2.1	Demand and Supply analysis and the dynamics of market price, elasticity of demand	6	3
	2.2	National Income determination model	3	3
	2.3	Solow growth model	3	3
	Practicum	Discuss on Demand and Supply analysis and the dynamics of market price, elasticity of demand, National Income determination model, Solow growth model	3	
<b>3</b>	<b>Difference Equations</b>		<b>20</b>	
	3.1	Meaning and concepts, Discrete time		1
			2	
	3.2	First-Order difference equation – solution - iterative method – General method	6	1,2
	3.3	The dynamic stability equilibrium and the stability conditions	4	1,2
	3.4	Phase diagrams for difference equations	2	1,2
	3.5	Higher Order difference equations(concept only)	2	1
	Practicum	Apply the solution techniques to solve real-world problems modeled by first-order difference equations. Interpret the solutions in the context of the original scenario.	4	
<b>4</b>	<b>Applications of difference equations in economics</b>		<b>13</b>	
	4.1	Cobweb model	3	3
	4.2	Lagged income determination model	3	3
	4.3	Harrod model	3	3
	Practicum	Discuss real-world scenarios where the cobweb model might be applicable, such as agricultural markets with time lags between planting and harvesting. Analyze the limitations of the cobweb model, including its simplifying assumptions and potential for unrealistic outcomes (persistent oscillations).	4	

<b>5</b>	<b>Teacher Specific Module</b>		

<b>Teaching and Learning Approach</b>	<p><b>Classroom Procedure (Mode of transaction)</b>  Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge  Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions</p> <p><b>Suggested Course Delivery Methods</b></p> <ul style="list-style-type: none"> <li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li> <li>o CD2 - Tutorials/Assignments</li> <li>o CD3 - Class Seminars</li> <li>o CD4 - Peer group discussions</li> </ul>										
<b>Assessment Types</b>	<p><b>MODE OF ASSESSMENT</b>  <b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b></p> <table border="1"> <thead> <tr> <th>Particulars</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>Class Tests</td><td>10</td></tr> <tr> <td>Assignments</td><td>10</td></tr> <tr> <td>Quiz</td><td>10</td></tr> <tr> <td><b>Total</b></td><td><b>30</b></td></tr> </tbody> </table>	Particulars	Marks	Class Tests	10	Assignments	10	Quiz	10	<b>Total</b>	<b>30</b>
Particulars	Marks										
Class Tests	10										
Assignments	10										
Quiz	10										
<b>Total</b>	<b>30</b>										

	<p align="center"><b>B. Semester End examination</b>  Written Examination (<b>70 marks</b>)  Only problems(application type) to be expected</p>		
	<b>Descriptive type</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Small Problem	5 out of 8	5 x 2 = 10
	Medium Problem	6 out of 9	6 x 5 = 30
	Large Problem	2 out of 4	2 x 15 = 30
	 <b>Total</b>		<b>70</b>


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4. Geoff Renshaw(2009): Maths for economics, 2<sup>nd</sup> Ed, OUP.
5. Akihito Asano(2013): An Introduction to Mathematics for Economics



<div>Est. in 1921</div> 	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>	<b>BA (Hons) Economics</b>					
<b>Course Name</b>	<b>Fire and Marine Insurance</b>					
<b>Type of Course</b>	<b>DCE</b>					
<b>Course Code</b>	<b>UC8DCEEEO402</b>					
<b>Course Level</b>	<b>400-499</b>					
<b>Course Summary</b>	This course is designed to equip learners with the origin and nature of fire insurance and marine insurance contracts, policy conditions, premium calculation, payment of claims.					
<b>Semester</b>	<b>8</b>	<b>Credits</b>			<b>4</b>	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	<b>Others</b>	
		<b>3</b>		<b>2</b>		
<b>Pre- requisites, if any</b>						

#### COURSE OUTCOMES (CO)

<b>CO No.</b>	<b>Expected Course Outcome</b> <i>Upon completion of this course, the students will be able to:</i>	<b>Learning Domains *</b>	<b>PO No</b>
<b>1</b>	understanding fire insurance fundamentals, policy management, risk assessment, and claims processing.	<b>U</b>	<b>1</b>

<b>2</b>	analysing of fire insurance underwriting principles, rate fixation methods, regulatory frameworks, and industrial risk ass	<b>An</b>	<b>2</b>
<b>3</b>	To understand the nature and scope of marine insurance contracts, principle of marine insurance, policy conditions conditions	<b>U</b>	<b>10</b>
<b>4</b>	To familiarize the learners with marine losses and procedure for payment of compensation.	<b>An</b>	<b>2</b>
<b><i>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</i></b>			

## **COURSE CONTENT**

### **Content for Classroom Transactions (Units)**

<b>Module</b>	<b>Units</b>	<b>Course description</b>	<b>Hrs</b>	<b>CO No.</b>
<b>1</b>	<b>Introduction to Fire Insurance</b> Est. in 1921		<b>15</b>	
	1.1	Definition – History And Origin Of Fire Insurance -Causes Of Fire – Prevention Of Loss – Fire Insurance Contracts-Kinds Of Fire Insurance Policies	<b>5</b>	<b>1</b>
	1.2	Policy Conditions – Implied And Express Conditions – Reinsurance – Definition – Advantages And Methods	<b>3</b>	<b>1</b>
	1.3	Principles Of Fire Insurance-Standard Fire Policy-Add On Covers-Variou s Fire Warranties	<b>4</b>	<b>1</b>
	1.4	Ex-Gratia Settlement-Procedures Related To Claim Settlement-Role Of Surveyors—Process Of Survey And Loss Assessment-Waiver And Estoppel	<b>3</b>	<b>1</b>
<b>Practicum:</b>	Hands-on experience involving case studies or simulations to apply theoretical knowledge in real-world settings.			<b>1</b>
<b>2</b>	<b>Underwriting and Rate Fixation in Fire Insurance</b>		<b>17</b>	


<b>2</b>	2.1	Fire Insurance Underwriting.-Fire Insurance Practice In India- Underwriting Experience Of Fire Insurance Portfolios – During Tariff Regime As Well As During Tariff-Free Regime-	<b>4</b>	<b>2</b>
	2.2	Underwriting Traditional Approach – New Dimensions As Per Irda Regulators	<b>3</b>	<b>2</b>
	2.3	Processes – Principles Of Rate Fixation – Basis Of Tariff Rates — Salvage Corps – Average Clause – Pro-Rata Condition Of Average.	<b>6</b>	<b>2</b>
	2.4	Structure Of All India Tariff-Rules And Regulations- Types Of Industrial Hazards-v Industrial Risk Policy-Petro Chemical Risk- Progress Of Fire Insurance	<b>4</b>	<b>2</b>
<b>Practicum</b>	Include case studies, risk assessments, simulation exercises, and exposure to underwriting practices in insurance companies or brokerage firms.			
<b>3</b>	Marine Insurance Contract, policies and conditions		<b>25</b>	
	3.1	Basic Aspects- Historical Background, Meaning & Scope - Subject Matter of Marine Insurance-	<b>7</b>	<b>3</b>
	3.2	Principles of Marine Insurance	<b>5</b>	<b>3</b>
	3.3	types of marine insurance contracts - Freight, cargo and vessel- Types of Marine Insurance Policies	<b>7</b>	<b>3</b>
	3.4	Policy Conditions- Clauses in Marine Policies - Classes of policies – policy conditions	<b>6</b>	<b>3</b>
<b>Practicum</b>	1. Using relevant examples discuss the nature and scope of marine insurance business in India.			

4	Marine Losses and Payment of Compensation		18													
.	4.1	Total loss, partial loss, particular average loss and general average loss	10	4												
	4.2	Procedure for preparation and presentation of claim	4	4												
	4.3	Payment of compensation	4	4												
Practicum:	1. Collect important documents required for marine insurance claim settlement															
5	Teacher Specific Module															
Teaching and Learning Approach		Classroom Procedure (Mode of transaction) Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions Suggested Course Delivery Methods <ul style="list-style-type: none"><li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>o CD2 - Tutorials/Assignments</li><li>o CD3 - Class Seminars</li><li>o CD4 - Peer group discussions</li></ul>														
Assessment Types		MODE OF ASSESSMENT A. Continuous Comprehensive Assessment (CCA) – 30 Marks <table><tr><td>Particulars</td><td>Marks</td></tr><tr><td>Class Tests</td><td>15</td></tr><tr><td>Assignments</td><td>5</td></tr><tr><td>Seminar/Viva</td><td>5</td></tr><tr><td>Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr><tr><td>Total</td><td>30</td></tr></table>			Particulars	Marks	Class Tests	15	Assignments	5	Seminar/Viva	5	Practicum/Quiz/Book Review/Fieldwork etc.	5	Total	30
Particulars	Marks															
Class Tests	15															
Assignments	5															
Seminar/Viva	5															
Practicum/Quiz/Book Review/Fieldwork etc.	5															
Total	30															

	<b>B. Semester End examination: Written Examination (70 marks)</b>			
	<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	6 out of 9	6 x 5 = 30
	Essays	450 words	2 out of 4	2 x 15 = 30
	<b>Total</b>			<b>70</b>

### Reference

1. K.C. Mishra | G.C. Thomas (2009), General Insurance : Principles and Practice, National Insurance Academy | Cengage Learning, New Delhi.
2. M.N. Mishra | S.B Mishra (2008), Insurance: Principles and Practice, S. Chand and Company, New Delhi.
3. P.K. Gupta (2008), Fundamentals of Insurance, Himalaya Publishing House, Mumbai.
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5. Rodder, Marine Insurance, Prentice Hall, New Jersey.
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7. Palande, Insurance in India, Sage Publications, Delhi
8. Bodla (2008), Insurance Management, Deep & Deep Publications, Delhi
9. Tripathy et al, (2009), General Insurance Business Operations and Decisions Making, National Insurance Academy | Cengage Learning, New Delhi.

<p>Est. in 1921</p> 	<p align="center"><b>UNION CHRISTIAN COLLEGE, ALUVA</b></p>				
<b>Programme</b>	<b>BA (Hons) Economics</b>				
<b>Course Name</b>	<b>Responsible Publication Ethics in Academic Research</b>				
<b>Type of Course</b>	<b>DCE</b>				
<b>Course Code</b>	<b>UC8DCEECO403</b>				
<b>Course Level</b>	<b>400 - 499</b>				
<b>Course Summary</b>	<p>This course provides a comprehensive overview of responsible publication ethics in academic research. It delves into Philosophy and Ethics, covering the definition, nature, and relevance of philosophy, along with ethics in academic research. The course focuses on Scientific Conduct, addressing ethical considerations, intellectual honesty, and scientific misconduct. Module 3 dives into Publication Ethics, covering best practices, conflicts of interest, and dealing with publication misconduct. Learners explore Open Access Publishing tools and engage in group discussions and plagiarism detection. This course also covers Databases and Research Metrics, providing insights into indexing, citation databases, and research metrics. The modular structure allows for in-depth exploration and practical discussions on ethical issues in academic publishing.</p>				
<b>Semester</b>	8	<b>Credits</b>		4	<b>Total Hours</b>
<b>Course Details</b>	<b>Learning Approach</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical / Practicum</b>	<b>Others</b>
		3		2	75
<b>Prerequisites, if any</b>					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, students will be able to:	Learning Domains *	PO No
1	articulate the definition, nature, and scope of philosophy, demonstrating a comprehensive understanding of the concept of philosophy and its relevance in the academic context.	K, U, A	1,3, 6
2	acquire a solid grasp of the ethical considerations inherent in scientific research and role of ethics in research, comprehend moral philosophy's connection to academic ethics, moral judgments and reactions within the context of academic research.	A, C, S	1,4,6
3	demonstrate proficiency in recognizing and addressing scientific misconduct, including Falsification, Fabrication, and Plagiarism (FFP) and its consequences and ethical implications such as redundant publications, duplicate content, and selective reporting of data in research.	E, An, S	4,5,6,10
4	possess a comprehensive understanding of publication ethics, including its definition, significance, and introduction on COPE and WAME, and will be able to identify and navigate conflicts of interest in the publication process.	E, An, AP	2,3,5,6
5	apply skills in responsible publishing, particularly in the areas of open-access initiatives, tools for open-access publishing, group discussions on publication misconduct, and the use of software tools for detecting plagiarism.	Ap, I, S	2,6,8,10
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

## COURSE CONTENT

### Content for Classroom Transactions (Units)

Module	Units	Course description	Hrs	CO No.
<b>1</b>	<b>Philosophy and Ethics</b>		<b>16</b>	
	1.1	Definition, nature, and scope of philosophy - Concept of philosophy and its relevance in academia	3	1, 2, 3
	1.2	Overview of the branches of philosophy and their implications in research - Definition of ethics and its role in research	3	1, 2,3
	1.3	Moral philosophy and its connection to academic ethics - Nature of moral judgments and reactions in the context of academic research - Understanding the ethical considerations in scientific research	3	2, 3, 4
	1.4	Importance of maintaining intellectual honesty and research integrity - Overview of Falsification, Fabrication, and Plagiarism in academic research - Consequences and ethical implications of FFP	3	1,3,4
	Practicum	Analyze examples of plagiarism (not citing sources, paraphrasing too closely) and how to avoid them	4	
<b>2</b>	<b>Publication Ethics</b>		<b>21</b>	
	2.1	Definition, significance, and introduction to publication ethics	3	1, 4
	2.2	Overview of COPE (Committee on Publication Ethics), WAME (World Association of Medical Editors), and other guidelines - Conflicts of interest in the publication process	5	1,3,5
	2.3	Types of publication misconduct - Violation of publication ethics, issues related to authorship and contributor-ship - Identifying and addressing publication misconduct - Dealing with complaints, appeals, and predatory publishers	5	1,2,5



	<b>2.4</b>	Understanding open access and its impact on academic publishing - Overview of open access initiatives and their benefits	5	1,3,4,5
	<b>Practicum</b>	Bring a class room discussion on prominent open access journals across various disciplines.	3	
<b>3</b>	<b>Publication Misconduct and Databases</b>		<b>22</b>	
	3.1	Subject-specific ethical issues and discussions on FFP, authorship, and conflicts of interest - Real-life examples of complaints and appeals from India and abroad	5	1,4, 5
	3.2	Addressing redundant publications, duplicate and overlapping publications, and salami slicing - Recognizing selective reporting and misrepresentation of data in research.	5	4,5
	3.3	Practical use of plagiarism detection software such as Turnitin, Urkund, and other open-source tools	6	3, 5
	Practicum	<u>Developing a Research Proposal</u> Draft a research proposal for a study in your field. Integrate ethical considerations into your proposal design, ensuring your research adheres to relevant codes and guidelines.	6	
<b>4</b>	<b>Research Metrics</b>		<b>16</b>	
	4.1	Utilizing SHERPA/RoMEO to check publisher copyright and self-archiving policies - Software tools for identifying predatory publications	4	4,5
	4.2	Journal finder and suggestion tools: JANE, Elsevier Journal Finder, Springer Journal Suggester	4	5
	4.3	Understanding indexing databases - Citation databases: Web of Science, Scopus, and their significance in research - Exploring impact factors of journals using Journal Citation Report, SNIP, SJR, IPP, Cite Score - Metrics such as h-index, g index, i10 index, altmetrics, and their relevance in evaluating research output	4	2,4,5

	Practicum	Explore software tools like Beall's List of Predatory Journals/Publishers and Cabell's Blacklist to identify potential predatory journals. Analyze the criteria used by these tools to identify predatory practices	4	
5	<b>Teacher Specific Module</b>			
<b>Teaching and Learning Approach</b>		<p>Suggested Classroom Procedure (Mode of transaction)</p> <p>CD1 Traditional Classroom Lectures: In-person lectures facilitated by an experienced instructor. This method is suitable for delivering foundational content where concepts need to be explained, and students can engage in discussions. It's also effective for addressing ethical principles through real-time discussions and case studies.</p> <p>CD2. Interactive Workshops: Conduct interactive workshops combining lectures with hands-on activities, group discussions, and case studies. This method is ideal for engaging students in problem-solving activities related to publication ethics and developing practical skills in publication ethics</p> <p>CD3. Online Modules and Tutorials: Identify or suggest online platforms to transact content asynchronously, including video lectures, tutorials, and quizzes. Online platforms are effective for covering theoretical aspects of publication ethics and providing tutorials on databases and research metrics. It allows students to learn at their own pace.</p> <p>CD4. Research Project-Based Learning: Incorporate a research project or journal publication into the course, where students apply the concepts learned in Modules 1 and 2 to a real-world problem. This method is highly effective for reinforcing learning outcomes related to publication ethics, research metrics, and databases. It encourages practical application and critical thinking.</p> <p>CD5. Experts Sessions: Invite guest speakers who are experts in research methodology and practitioners in the field. Experts enhance the understanding of practical aspects of Publications in Journals. Industry practitioners can share insights on ethical considerations and effective presentation skills. These delivery methods can be combined or adapted based on the specific needs and preferences of the students and the course instructor.</p>		

Assessment Types	MODE OF ASSESSMENT	
	A. Continuous Comprehensive Assessment (CCA) – 30 Marks	
	Particulars	Marks
	Class Tests	15
	Assignments	5
	Seminar/Viva	5




	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	
	<b>Total</b>	30	
	<b>B. Semester End examination</b> <b>Written Examination (MCQ 10 marks and Written Answers 60 marks)</b>		
<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
Short Answer	50 words	5 out of 8	5 x 2 = 10
Short Essay	150 words	4 out of 7	4 x 5 = 20
Essays	450 words	2 out of 4	2 x 15 = 30
MCQ	NA	10	10 x 1 = 10
<b>Total</b>			<b>70</b>

## References:

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<div>Est. in 1921</div> <div></div>		<b>UNION CHRISTIAN COLLEGE, ALUVA</b>					
<b>Programme</b>		<b>BA (Hons) Economics</b>					
<b>Course Name</b>		<b>Kerala Economy: Patterns and Challenges</b>					
<b>Type of Course</b>		<b>DCE</b>					
<b>Course Code</b>		<b>UG8DCEECO404</b>					
<b>Course Level</b>		<b>400-499</b>					
<b>Course Summary</b>		This advanced course operates at a higher cognitive level, facilitating learners to engage with the intricacies of the Kerala economy through a pedagogical approach. Module 1 initiates an in-depth exploration of the geographical, historical, and cultural dimensions of Kerala, delving into economic structures, historical policies, and contemporary challenges. Module 2 shifts focus to Social Indicators and Human Development, scrutinizing education, healthcare, poverty, and migration dynamics. Environmental Sustainability in Module 3 investigates challenges, policies, natural resource management, and climate change implications. The course culminates in Module 4, Economic Reforms and Future Prospects, critically assessing past reforms, industrialization, globalization, and proposing policy recommendations for sustainable and inclusive development in Kerala.."					
<b>Semester</b>		8	Credits			4	
							Total Hours
<b>Course Details</b>	Learning Approach	Lecture	Tutorial	Practical	Others		75
		3			2		
<b>Pre-requisites, if any</b>							

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
	Upon completion of this course, students will be able to;		
1	illustrate the geographical, historical, and cultural context of Kerala, comprehending the unique social and political factors that have shaped the state's economy over time.	U	2,3,4, 10
2	analyze the primary, secondary, and tertiary sectors in the Kerala economy, evaluating the roles of agriculture, industry, and services in shaping its economic structure.	A, E	1, 2, 6, 8, 10
3	examine historical economic policies, understanding their impact on the current economic scenario in Kerala, providing a historical perspective on the state's economic development.	E, An	6,8,9,10
4	theorize current challenges faced by the Kerala economy and explore potential opportunities for growth and development, fostering a critical understanding of the state's economic landscape.	An, C, Ap	2, 3, 4, 7
5	Compile social indicators, human development policies, and challenges in Kerala, proposing strategies to address these challenges and promoting overall well-being. Additionally, they will review case studies and identify best practices for application and improvement in the context of human development.	S, I, Ap	4,5,6, 8
<b>*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)</b>			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1	<b>Foundations of Kerala Economy</b>		<b>20</b>	
	1.1	Introduction to the geographical, historical, and cultural context of Kerala Understanding the evolution of the economy in the context of Kerala's unique social and political landscape Growth and Development since 1956- Trends and Pattern of GSDP	4	1, 2
	1.2	Analysis of the primary, secondary, and tertiary sectors in the Kerala economy  Discussion on the role of agriculture, industry, and services in shaping the economic structure	4	1,2
	1.3	Examination of economic policies and development strategies adopted in different periods Impact of historical policies on the present economic scenario	4	1,2
	1.4	Identification of current challenges faced by the Kerala economy (Financial Crisis) Exploring potential opportunities for economic growth and development	4	1,2
	Practicum	Identify the current challenges faced by the Kerala economy especially Financial Crisis. Suggest solutions and prepare report .	4	
2	<b>Social Indicators and Human Development</b>		<b>20</b>	



	2.1	Analysis of key social indicators, including education, healthcare, and poverty Understanding the Human Development Index (HDI) and its relevance in the Kerala context	4	3, 4
	2.2	Evaluation of policies promoting social inclusion and gender equality Discussion on the impact of these policies on economic development	4	3, 4
	2.3	Exploration of the role of migration and remittances in the Kerala economy Analysis of the economic and social implications of migration	4	3, 4
	2.4	Identification and analysis of challenges affecting human development in Kerala Strategies to address these challenges and enhance overall well-being.	4	4
	Practicum	Explore the trends in migration in your locality	4	
	<b>Environmental Sustainability</b>		19	
3	3.1	Examination of environmental issues affecting the state-Impact of economic activities on the environment	4	4, 5
	3.2	Analysis of policies and initiatives promoting environmental sustainability Exploration of the balance between economic growth and environmental conservation	4	4, 5
	3.3	Discussion on the management of natural resources in Kerala Strategies for sustainable utilization and conservation	4	4, 5
	3.4	Understanding the implications of climate change on the Kerala economy Examining adaptation strategies for economic resilience	4	4, 5

	Practicum	Investigate local climate change impacts through farmer dialogue and bring classroom discussion.	3	
4	<b>Economic Reforms and Future Prospects</b>		16	
	4.1	Overview of economic reforms and their impact on economic growth and development Analysis of industrial policies and initiatives fostering innovation	4	2, 3, 5
	4.2	Exploration of opportunities for industrial growth Analysis of trade patterns and opportunities for global engagement	4	2, 4, 5
	4.3	Discussion on potential future scenarios for the Kerala economy Formulation of policy recommendations for sustainable and inclusive development	4	1,2,3,4,5
	Practicum	Develop policy recommendations and strategies for issues pertaining in Kerala	4	
5	<b>Teacher specific Module</b>			

<p><b>Teaching and Learning Approach</b></p>	<p><b>Classroom Procedure (Mode of transaction)</b></p> <p><b>Classroom Lectures and Authentic learning:</b> Traditional lectures can provide a solid factual knowledge in the case of Unit 1.2 and 1.3 (Agriculture Growth and Performance-Trends in production and productivity - Land Reforms and Land use pattern - Changes in Cropping Pattern - Agricultural Wages -.Collective farming Initiatives—green army - .Crop Insurance Schemes -Special Agricultural Zone -.Finance to Agriculture -.Livestock-Fisheries-Water Resources and-Forestry - Agricultural Crisis - Food Security - .Industry-Growth and Performance-Industrial Backwardness - Mining, Manufacturing and Construction Sector- Issues and Challenges - Central Sector Investment - State Public Sector Undertakings - Industrial Financing - MSMEs—Traditional Industries—Electronic industry- KELTRON and Electronic Parks)</p> <p>-</p> <p><b>Active-interactive learning, brain storming, seminar, group activities:</b> Foster student engagement through interactive class discussions and this can be applied in the case of <b>Module 2</b> (Growth and performance of Service Sector-Income Generation and Employment Issues - Performance of service Sub-Sectors- Economic Infrastructure—Transport—Energy-- Communication --Social Infrastructure- Health and Education – Tendencies of Exclusion - Kerala Disability Census 2015—Economic and Community Services - Demographic Profile of the State—Demographic Transition in Kerala—Sex Ratio— Nutrition, Morbidity and Ageing. - Trends, Pattern and Problems of Migration—Rehabilitation Issues of Return Migrants</p> <p><b>Debate and Group Discussions under the Guidance of Course Faculty:</b> This method can be used in the case of <b>Module 4 and 5</b> as well as the topics like Decentralised Planning—Financing of Local Government Plans. - Rural Development Programmes— Kudumbasree - Development and Utilisation of Natural Resource—Issues of Reclamation - Tourism and Environmental impact—Waste management—Policies and programmes— Impact of Flood 2018 and Rebuilding initiative etc will be discussed in the class room.</p> <p><b>Course Delivery methods</b></p> <ul style="list-style-type: none"> <li>o CD1 - Lecture by use of boards/LCD projectors/ OHP/Projectors</li> <li>o CD2 - Tutorials/Assignmentsby the Guidance of course Faculty</li> <li>o CD3 - Class Seminars</li> <li>o CD4 - Peer group Discussions</li> <li>o CD5 – Debate and Group Discussions by the Guidance of course Faculty</li> </ul>
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<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b>	
	<b>A. Continuous Comprehensive Assessment (CCA)</b> Module-wise Assessments Mid-term Exams. A course Paper on a Contemporary Economic Issue in India Class Participation and Discussions	
	<b>B. Semester End examination</b> <b>2 hr written examination for 70 marks</b>	
<b>Mode of Transaction</b>	<b>Course Outcome</b>	<b>Course Delivery Method</b>
	CO1	CD1, CD4
	CO2	CD1, CD3, CD4, CD5
	CO3	CD2, CD3, CD4
	CO4	CD1, CD3, CD4, CD5
	CO5	CD1, CD2, CD4, CD5

### References / Suggested Readings

1. "Kerala: A Short History"; K. M. Panikkar
2. "A Survey of Kerala History"; 'A. Sreedhara Menon
3. "Land Reforms in India: Volume 9. Kerala" ;B. S. Baviskar
4. "Land Reforms in India: Kerala" ;V. J. Varghese
5. Prakash, B. A. (1984). Changes in agrarian structure and land tenures in Kerala: A historical review. State and Society, 5(1), 1-18
6. "Industrial Development in Kerala: A Historical Perspective" ;K. K. George
7. "Economic Transition in Kerala: A New Industrial Economy?";B. A. Prakash
8. Book Title: "Education and Social Change in Kerala" Author: K. N. Panikkar
9. Book Title: "Education, Society, and Development in Kerala: A Historical Overview" Author: J. Devika
10. "Kerala's Education: Decadal Development and Changing Scenario";P. K. Michael Tharakan

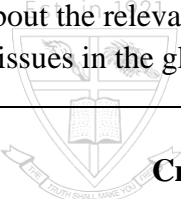
11. Nabae, K. (2003). The Health Care System in Kerala - Its Past Accomplishments and New Challenges -.
12. V Raman Kutty, Historical analysis of the development of health care facilities in Kerala State, India, *Health Policy and Planning*, Volume 15, Issue 1, March 2000, Pages 103– 109,
13. "Public Health and Society: A Historical Perspective of Health Services in Kerala";K. S. James
14. 'Health Status Of Kerala" PGK Panikar and C R Soman, CDS. 1984. pp.159.
15. "Social Welfare in India: Policies and Programs"; Ramesh Arora
16. "Social Welfare Administration: Concept, Practices, and Challenges"; Ram A. Cnaan
17. "Kerala Economy: Trajectory of Growth and Development"; G. Mohan Gopal
18. "Economic Development in Kerala: Problems and Prospects"; K. P. Kannan
19. "Sustainable Development: Issues and Perspectives"; Velayudhan Puthiyidath
20. "Sustainable Development: Principles, Policies, and Practices"; S. S. Pophale
21. "Challenges to Kerala Economy: An Agenda for Revitalization" ; R. Mohan
22. "Economic Challenges and Policy Issues in Early Twenty-First Century Kerala" K. P. Kannan
23. "*Kerala's Economic Development: Performance and Problems in the Post-Liberalization Period*"; K. P. Kannan<sup>n 1921</sup>
24. "*Economic Survey of Kerala*";Kerala State Planning Board
25. "*Economic Reforms and Development in Kerala: A Critical Assessment*" K. P. Kannan;
26. "*Emerging Kerala: The Growth Challenges Ahead*" ; D. Narayana
27. "*Kerala's Economic Vision 2030: Sustaining High Growth Path*" ;K. M. Chandrasekhar
28. "*Economic Challenges in the Changing Global Landscape*; "Atul Kohli
29. Kerala State Planning Board. (2022). *Economic Review 2022 - Kerala*.
30. Kerala Budget Analysis.
31. Gulati Institute of Finance and Taxation. (2020). *Kerala Economy Journal – Issues from 2020*.
32. Ghosh, B. N. (2009). *The Economy of Kerala: Yesterday, Today And Tomorrow* (2009th ed.). Serials Publications.
33. Kerala State Planning Board. (2021). *Kerala Development Report 2021: Initiatives, Achievements, and Challenges*.

#### **Additional Readings**

1. Mani, S. (Ed.). (2020). *Kerala and World Economy* (W.P. No. 488). CDS.
2. United Nations. (2000). *Poverty, Unemployment and Development Policy: A Case Study of Selected Issues with Reference to Kerala* (Reprint). pp. 235.
3. Zachariah, K.C., Kannan, K.P., & Irudaya Rajan, S. (2002). *Kerala's Gulf Connection: CDS Studies on International Labour Migration from Kerala State in*

- India*. CDS. pp. 230.
4. Prakash, B. A. (2022). *COVID-19 Pandemic and Exodus of Keralite Emigrant Workers from GCC Countries: Causes of Return, Activity Status of Returnees and Economic Impact* (W.P. No. 507). CDS, April 2022.
  5. Irudaya Rajan, S., Pattath, B., & Zachariah, K.C. (2021). *Kerala Return Emigrant Survey 2021: What Next for Return Migrants of Kerala?* (W.P. No. 504). CDS, September 2021.
  6. Irudaya Rajan, S., & Zachariah, K.C. (2019). *Emigration and Remittances: Evidences from the Kerala Migration Survey, 2018* (W.P. No. 483). CDS, January 2019.
  7. Isaac, T. M. Thomas, & Mohan, R. (2016). *Sustainable Fiscal Consolidation: Suggesting the Way Ahead for Kerala* (W.P. No. 469). CDS, April 2016.
  8. Zachariah, K.C., & Irudaya Rajan, S. (2015). *Dynamics of Emigration and Remittances in Kerala: Results from the Kerala Migration Survey 2014* (W.P. No. 463-CDS). CDS, September 2015.



<b>Programme</b>	<b>BA (Hons) Economics</b>			
<b>Course Name</b>	<b>Open Economy Macroeconomics</b>			
<b>Type of Course</b>	<b>DCE</b>			
<b>Course Code</b>	<b>UG8DCEECO405</b>			
<b>Course Level</b>	<b>400-499</b>			
<b>Course Summary</b>	<p>This is a graduate level course on open economy macroeconomics and students will be assumed to have some background in the area of International Trade and Basic Macroeconomics. Understanding the economic intuition behind the models as well as thinking critically about the underlying assumptions and how well they fit actual open economies will be a major focus. Students will be challenged to think about the relevance of the various theories and models to contemporary policy issues in the global economy.</p>			
<b>Semester</b>	<b>8</b>	 <b>Credits</b>	<b>4</b>	<b>Total Hours</b>

Course Details	Learning Approach	Lecture	Tutorial	Practical/Practicum	Others	
		3		2		75
Pre-requisites, if any						





## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Evaluating further upon the already known basic concepts related to International trade.	E	1, 10
2	Analysing the validity of the well-known open economy models under different regimes.	An	10
3	Analysing how things have played out in this domain with special focus on real world phenomena.	An	1, 2,10
4	Evaluating the consequences of trade to Small Economies.	E	1,6,10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1		<b>Introduction to Open Economy Macroeconomics</b>	15	
	1.1	Basic Concepts- Exchange Rates- Fixed-Floating- Intermediate-Integration of Goods Markets-Gains from trade- Barriers to international integration- Integration of Financial Markets-Do financial markets work in practice as they do in theory?	6	1
	1.2	Parity Conditions, Balance of Payments Accounting.	4	1
	1.3	Brief Overview of the Global Financial Architecture Devaluation and the Trade Balance-The elasticities approach to the trade balance-The Marshall-Lerner condition	5	1
2		<b>THE MUNDELL-FLEMING MODEL</b>	20	
	2.1	The open-economy Keynesian model-The Mundell-Fleming model with a fixed exchange rate-The Taylor Rule	5	1

	2.2	Unconventional Monetary Policies-Monetary policy at the Zero Lower Bound-The real interest rate in the model.- International reserve flows- Reserve flows in the Mundell-Fleming model-The example of China's sterilization of inflows, 2003-08	8	1
	2.3	Mundell-Fleming with a floating rate: The model when the exchange rate is flexible-The example of Japan's 2012-15 monetary expansion - Mundell Fleming with perfect capital mobility:The model when the country	7	2
		loses control over its interest rate-The Impossible Trinity.		
<b>3</b>		<b>Special Open economy Topics</b>	<b>15</b>	
	3.1	Global current account imbalances: what does the future hold in store?- Exchange rate policy as a tool of development policy - Exchange rate-based stabilization programs in developing countries	7	1,10
	3.2	The Choice of Exchange Rate Regime: Fixed, Flexible, or Intermediate? - Reserve accumulation: costs and benefits - Time series properties of macroeconomic variables. Some basic issues.	8	1,2
<b>4</b>		<b>SMALL OPEN ECONOMIES</b>	<b>10</b>	
	4.1	The Salter-Swan SOE model- Devaluation in small open economies-Currency mismatch, balance sheets & contractionary devaluations	4	1,6
.	4.2	Introduction to crises in Emerging Market Economies (EMEs)- Sudden stops-Managing outflows.- The Dutch Disease-Macroeconomic consequences of a natural resource boom-	6	1,6
<b>5</b>		<b>Teacher specific Module</b>		

<b>Teaching and Learning Approach</b>	<p>Classroom Procedure (Mode of transaction)</p> <p>Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge</p> <p>Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions</p> <p>Suggested Course Delivery Methods</p> <ul style="list-style-type: none"> <li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li> <li>o CD2 - Tutorials/Assignments</li> <li>o CD3 - Class Seminars</li> <li>o CD4 - Peer group Discussions</li> </ul>												
<b>Assessment Types</b>	<p style="text-align: center;"><b>MODE OF ASSESSMENT</b></p> <p style="text-align: center;"><b>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</b></p> <table border="1" data-bbox="518 762 1344 1192"> <thead> <tr> <th>Particulars</th><th>Marks</th></tr> </thead> <tbody> <tr> <td>Class Tests</td><td>15</td></tr> <tr> <td>Assignments</td><td>5</td></tr> <tr> <td>Seminar/Viva</td><td>5</td></tr> <tr> <td>Project/Practicum/Quiz/Book Review/Fieldwork etc.</td><td>5</td></tr> <tr> <td><b>Total</b></td><td><b>30</b></td></tr> </tbody> </table>	Particulars	Marks	Class Tests	15	Assignments	5	Seminar/Viva	5	Project/Practicum/Quiz/Book Review/Fieldwork etc.	5	<b>Total</b>	<b>30</b>
Particulars	Marks												
Class Tests	15												
Assignments	5												
Seminar/Viva	5												
Project/Practicum/Quiz/Book Review/Fieldwork etc.	5												
<b>Total</b>	<b>30</b>												

<b>B. Semester End examination</b> <b>Written Examination (MCQ 10 marks and Written Answers 60 marks)</b>				
	<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>
	Short Answer	50 words	5 out of 8	5 x 2 = 10
	Short Essay	150 words	4 out of 7	4 x 5 = 20
	Essays	450 words	2 out of 4	2 x 15 = 30
	MCQ	NA	10	10 x 1 = 10
	<b>Total</b>			70




### References:

1. Gandolfo, G., International Finance and Open Economy Macroeconomics (Springer, 2001).
2. Rodseth, A., Open Economy Macroeconomics (Cambridge University Press, 2000).
3. Robert A. Blecker, Taming Global Finance: A Better Architecture for Growth and Equity (Washington: Economic Policy Institute, 1999).
4. Dornbusch, Rudiger, Open Economy Macroeconomics (New York: Basic Books, 1980).
5. Marrewijk, C. 2004. "An Introduction to International Money and Foreign Exchange Markets," Working Paper Number 2004-02, The University of Adelaide.
6. Caves, Frankel & Jones, World Trade and Payments (WTP), 2007, Chapters 15 & 17.2
7. Caves, Frankel & Jones, WTP, Chapter 16.1 (pp.291-97) & Supplement (pp. S43-S44).
8. Caves, Frankel and Jones WTP, Chapters 17.1, 17.3 & 18.1-18.2
9. Trevor Swan, 1963, "Longer Run Problems of the Balance of Payments," in H.W.Arndt & W.M.Corden, eds., The Australian Economy (Cheshire, Melbourne).
10. Guillermo Calvo, Leo Leiderman and Carmen Reinhart, 1996, "Inflows of Capital to

- Developing Countries in the 1990s," *Journal of Economic Perspectives*, 10, 2, Spring, 123-139.
11. W. Max Corden and J. Peter Neary, 1982, "Booming Sector and De-industrialisation in a Small Open Economy," *The Economic Journal*. Vol. 92, No. 368, Dec., pp. 825-848.
  12. Jeffrey Sachs, 2007, "How to Handle the Macroeconomics of Oil Wealth," *Escaping the Resource Curse*, Humphreys, Sachs & Stiglitz, eds. (Columbia U. Press), pp.173-193.



	<b>UNION CHRISTIAN COLLEGE, ALUVA</b>			
<b>Programme</b>	<b>BA (Hons) Economics</b>			
<b>Course Name</b>	<b>Heterodox Economics</b>			
<b>Type of Course</b>	<b>DCE</b>			
<b>Course Code</b>	<b>UG8DCEEEO406</b>			
<b>Course Level</b>	<b>400-499</b>			
<b>Course Summary</b>	<p>Heterodox economics is defined as a collection of separate schools of thought or traditions such as Marxism, institutionalism, post-Keynesianism, evolutionary economics, feminist and green economics, and more. The aim of this course is to revisit a set of economic concepts that are being extensively used in the economics curriculum--but with a critical stance that concentrates on philosophical and methodological considerations. This course will survey contemporary heterodox approaches to economic research, both from a microeconomic and a macroeconomic perspective.</p>			
<b>Semester</b>	8	<b>Credits</b>	4	<b>Total Hours</b>

Course Details	Learning Approach	Lecture	Tutorial	Practical	Others (Practicum)	
		3		2		75
<b>Pre-requisites, if any</b>	An understanding of the evolution of the subject of Economics starting with the classical political Economy and ranging upto the modern schools of thought.					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome <i>Upon completion of this course, the students will be able to:</i>	Learning Domains *	PO No
1	Understand the differences between Heterodox and Mainstream Economics.	U	10
2	Evaluate the Heterodox View of the Economy.	E	01,10
3	analyse the Heterodox perspectives with regard to central activities of the Economy.	An	01,10
4	appreciate how Heterodox theories are critical of the Conventional Economic Theories.	Ap	01,06,10
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

## COURSE CONTENT

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1		<b>Introduction to Open Economy Macroeconomics</b>	<b>18</b>	
	1.1	Basic Concepts- Exchange Rates- Fixed- Floating- Intermediate-Integration of Goods Markets-Gains from trade- Barriers to international integration- Integration of Financial Markets-Do financial markets work in practice as they do in theory?	6	1
	1.2	Parity Conditions, Balance of Payments Accounting.	4	1
	1.3	Brief Overview of the Global Financial Architecture Devaluation and the Trade Balance-The elasticities approach to the trade balance-The Marshall-Lerner condition	5	1
	Practicum	Analyze historical trends in India's trade balance and exchange rate.	3	
2		<b>THE MUNDELL-FLEMING MODEL</b>	<b>25</b>	

	2.1	The open-economy Keynesian model-The Mundell-Fleming model with a fixed exchange rate-The Taylor Rule	5	1
	2.2	Unconventional Monetary Policies-Monetary policy at the Zero Lower Bound-The real interest rate in the model.- International reserve flows- Reserve flows in the Mundell-Fleming model-The example of China's sterilization of inflows, 2003-08	8	1
	2.3	Mundell-Fleming with a floating rate: The model when the exchange rate is flexible-The example of Japan's 2012-15 monetary expansion - Mundell Fleming with perfect capital mobility:The model when the country loses control over its interest rate-The Impossible Trinity.	7	2
	Practicum	Case Study: Japan's Quantitative Easing (2012-2015): Research Japan's aggressive monetary expansion during this period. Analyze the impact of quantitative easing on the Japanese yen exchange rate. Evaluate the effectiveness of this policy in stimulating economic growth and inflation. Or Research the recent debate on currency internationalization and the potential for the Indian Rupee to become a global reserve currency. Analyze the implications for India's exchange rate regime and monetary policy autonomy.	5	
<b>3</b>		<b>Special Open economy Topics</b>	<b>20</b>	
	3.1	Global current account imbalances: what does the future hold in store?- Exchange rate policy as a	7	1,10



		tool of development policy - Exchange rate-based stabilization programs in developing countries		
	3.2	The Choice of Exchange Rate Regime: Fixed, Flexible, or Intermediate? - Reserve accumulation: costs and benefits - Time series properties of macroeconomic variables. Some basic issues.	8	1,2
	Practicum	Select a developing country that has implemented a recent ERBS program (e.g., Argentina's Convertibility Plan, Mexico's Tequila Crisis). Gather information about the program's goals, specific policies implemented (e.g., pegging the exchange rate), and its historical context. Research the economic situation of the chosen country before the ERBS program. Analyze the factors that contributed to high inflation and external imbalances. Consider alternative policy options that might have been pursued. Student's will gain valuable insights into the complexities of economic stabilization in developing countries	5	
<b>4</b>		<b>SMALL OPEN ECONOMIES</b>	<b>12</b>	
	4.1	The Salter-Swan SOE model- Devaluation in small open economies-Currency mismatch, balance sheets & contractionary devaluations	4	1,6
.	4.2	Introduction to crises in Emerging Market Economies (EMEs)- Sudden stops-Managing outflows.- The Dutch Disease-Macroeconomic consequences of a natural resource boom-	6	1,6
	Practicum	Select a country or region that has experienced a recent natural resource boom (e.g., oil discovery, mineral exploration). Discuss the potential signs of Dutch disease Practicum 2 : Kerala and the Dutch Disease Discuss potential signs of the Dutch Disease in Kerala's economy	2	

5		Teacher specific Module								
Teaching and Learning Approach	Classroom Procedure (Mode of transaction) Classroom Lectures and Authentic Learning: Traditional lectures can provide solid factual knowledge Active-interactive learning, brainstorming, seminar, group activities: Foster student engagement through interactive class discussions Suggested Course Delivery Methods <ul style="list-style-type: none"><li>o CD1 - Lecture by use of boards/LCD projectors/ Projectors etc.</li><li>o CD2 - Tutorials/Assignments</li><li>o CD3 - Class Seminars</li><li>o CD4 - Peer group Discussions</li></ul>									
Assessment Types	<div>MODE OF ASSESSMENT</div> <div>A. Continuous Comprehensive Assessment (CCA) – 30 Marks</div> <table><tr><th>Particulars</th><th>Marks</th></tr><tr><td>Class Tests</td><td>15</td></tr><tr><td>Assignments</td><td>5</td></tr></table>				Particulars	Marks	Class Tests	15	Assignments	5
Particulars	Marks									
Class Tests	15									
Assignments	5									

	Seminar/Viva			5	
	Project/Practicum/Quiz/Book Review/Fieldwork etc.			5	
	<b>Total</b>			<b>30</b>	
	<b>B. Semester End examination</b> <b>Written Examination (MCQ 10 marks and Written Answers 60 marks)</b>				
	<b>Descriptive type</b>	<b>Word limit</b>	<b>Number of questions to be answered</b>	<b>Marks</b>	
	Short Answer	50 words	5 out of 8	5 x 2 = 10	
	Short Essay	150 words	4 out of 7	4 x 5 = 20	
	Essays	450 words	2 out of 4	2 x 15 = 30	
	MCQ	NA	10	10 x 1 = 10	
	<b>Total</b>			<b>70</b>	

#### References:

1. Gandolfo, G., International Finance and Open Economy Macroeconomics (Springer,2001).
2. Rodseth, A., Open Economy Macroeconomics (Cambridge University Press, 2000).
3. Robert A. Blecker, Taming Global Finance: A Better Architecture for Growth and Equity (Washington: Economic Policy Institute, 1999).
4. Dornbusch, Rudiger, Open Economy Macroeconomics (New York: Basic Books, 1980).
5. Marrewijk, C. 2004. ``An Introduction to International Money and Foreign Exchange Markets,’’ Working Paper Number 2004-02, The University of Adelaide.
6. Caves, Frankel & Jones, World Trade and Payments (WTP), 2007, Chapters 15 & 17.2

7. Caves, Frankel & Jones, WTP, Chapter 16.1 (pp.291-97) & Supplement (pp. S43-S44).
8. Caves, Frankel and Jones WTP, Chapters 17.1, 17.3 & 18.1-18.2
9. Trevor Swan, 1963, "Longer Run Problems of the Balance of Payments," in H.W.Arndt & W.M.Corden, eds., The Australian Economy (Cheshire, Melbourne).
10. Guillermo Calvo, Leo Leiderman and Carmen Reinhart, 1996, "Inflows of Capital to Developing Countries in the 1990s," Journal of Economic Perspectives, 10, 2, Spring, 123-139.
11. W. Max Corden and J. Peter Neary, 1982, "Booming Sector and De-industrialisation in a Small Open Economy," The Economic Journal. Vol. 92, No. 368, Dec., pp. 825-848.
12. Jeffrey Sachs, 2007, "How to Handle the Macroeconomics of Oil Wealth," Escaping the Resource Curse, Humphreys, Sachs & Stiglitz, eds. (Columbia U. Press), pp.173-193.



<b>Project (Semester 8)</b>		
<b>Course Code</b>	<b>Course Abbreviation</b>	<b>Credit</b>
<b>UC8PRJECO400</b>	<b>PRJ</b>	<b>12</b>

## **7. Internship and Project Evaluation Guidelines**

<b>Credit</b>	<b>2</b>
<b>Assessment</b>	Internal – 15 marks External – 35 marks

### **Project for Honours with Research**

<b>Credit</b>	<b>12</b>
<b>Assessment</b>	Internal – 60 marks External – 140 marks (Project 100 marks and Viva 40 marks)
<b>Total</b>	<b>200 marks</b>

### **Project for Honours**

<b>Credit</b>	<b>8</b>
<b>Assessment</b>	Internal – 30 marks External – 70 marks (Project 50 marks and Viva 20 marks)
<b>Total</b>	<b>100 marks.</b>

## AMENDMENTS

Course Name : Essentials of Economics- II

Course Code : UC2DSCECO100

COURSE CONTENT				
Module	unit	Course Description (Modified)	Hours (Modified)	Page No.
1	1.1	Rationality in Traditional Economics and Behavioral Economics	No Change	41
3	3.3	No Change	3	42
	3.4	Deleted	No Change	
4	4.1	National income concepts- GDP- GNP-NDP-NNP-Factor cost and market price- Circular flow of income and expenditure(Two sector only)	No Change	43
	4.2	Methods of measuring national income- Macroeconomic Equilibrium: AD=AS (Two sector only)	No Change	
END SEMESTER EVALUATION (ESE)				
Max.Marks-70 Duration: 2 Hrs				Page No.
Descriptive Type	Word Limit	Number of Questions to be Answered	Marks	44
MCQ	NA	10 out of 10	10 x 1 = 10	
Short Answer	50 words	10 out of 15	10 x 3 = 30	
Short Essay	160 Words	5 out of 10	5 x 6 = 30	

Course Name : Understanding Indian Economy  
Course Code : UC2MDCECO100

END SEMESTER EVALUATION (ESE)								
Max.Marks-50						Duration: 1.5 Hrs		Page No
Descriptive Type		Word Limit	Number of Questions to be Answered		Marks		49	
MCQ		NA	15 out of 15		15 x 1 = 15			
Short Answer		30 Words	10 out of 14		10 x 2 = 20			
Short Essay		150 Words	3 out of 7		3 x 15 = 15			
Sl No:	Semester	Course Code and Name		Module	Unit Numbers	Course Outcome Numbers		Page Number
						Existing	Modified	
1	1	UC1DSCECO100: Essentials of Economics - I		2	2.2	2	2, 3	30
2	1	UC1MDCECO100: Economics and Finance in Everyday Life		2	2.3	4	3, 4	36
				3	3.3	6	3,6	

Course Name: Understanding Indian Economy  
Course Code: UG2MDCECO100

END SEMESTER EVALUATION (ESE)				
Max.Mark-50				Page No
Duration: 1.5 Hrs				
Descriptive Type	Word Limit	Number of Questions to be Answered	Marks	
MCQ	NA	15 out of 15	15 x 1 = 15	

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Short Answer	30 words	10 out of 14	$10 \times 2 = 20$	49
Short Essay	150 words	3 out of 7	$3 \times 5 = 15$	

UC1MDCECO101: Foundations in Economics and UC2MDCECO101: Fundamentals of Foreign Trade, to be included in the First and Second semesters Multi Disciplinary Course basket from the academic year 2025- 2026.

