Syllabus

DEPARTMENT OF ECONOMICS

About the Department

Economics department as a pioneer department was established in 1964 with eminent Prof.Dr.R.E.Benjamin, who migrated from GTN College and elevated as Professor of Economics in Madurai Kamaraj University. Subsequently Prof R.Munisamy followed by Prof.V.Shanmugasundaram adorned this department from 1973. With Stupendous efforts, they conducted various activities for the students in the banner of Planning Forum, Population study Club and Leo Club.

After their retirement we have also conducted budget panel discussion, State level statistical survey and Regional level workshop in our college.In 2015, Our College was accredited with B Grade by NAAC and in 2017 Autonomous status was conferred by University Grants Commission. Immediately after this, our Department was geared up to organize many Funding programme at National level and at State level with the sponsorship of UGC. ICSSR, NHRC, DST-EDII, TANSCHE,TNSCST etc.

PRINCIPAL

Dr. P. Balagurusamy**,**M.A., M.Phil., M.Ed., P.G.D.C.A., Ph.D.,

STAFF MEMBERS

2. Dr. P. Ravichandran, M.A., M.Com. M.B.A., M.Phil., Ph.D. - Associate Professor & Head
2. Mr.S.Arun, M. A., MPhil., SET., - Assistant Professor

SUMMARY OF HOURS AND CREDIT
PG COURSE – M.Com
FIRST SEMESTER

Part	Course Code	Course Title	Hours	Credit
I	20PCOC15	Advanced Business Statistics	6	5
		Total	6	5

SECOND SEMESTER

Part	Course Code	Course Title	Hours	Credit
I	20PCOC25	Quantitative Techniques	6	5
		Total	6	5

Programme	M.Com	Programme Code	PCO
Course Code	20PCOC15	Number of Hours/ Cycle	6
Semester	I	Max. Mark	100
Part	III	Credit	5
CORE COURSE			
Course Title	Advanced Business Statistics		
Cognitive Level	Upto K 4		

Preamble

Statistics is the language of the uncertainties riddled modern information age.Statistics facilitates the decision making process by quantifying the element ofchance or uncertainties. It's descriptive and inferential roles not only formulate the basis of the growth of almost all the disciplines of the contemporary world, but also provide an array of non-traditional employment avenues ranging from that of spotanalysis to business analysts. The thrust of the course is to prepare students to enter into a promising professional life even after graduation, as also provide to them a platform for pursuing higher studies leading to post-graduate or doctorate degree. The objective of this course is to provide in-depth knowledge of statistical tools to the students so as to enable them to make statistical analysis in business/industry, which are also highly important for further studies in management.

UNIT – I Correlation and Regression Analysis **Hours 20**

Correlation Analysis: Meaning-Uses – Types– Methods: Graphical Method and Mathematical Method- Partial and MultipleCorrelations.

Regression Analysis: Meaning-Significance-Difference – Methods – Regression line –Equation - Standard Error -Multiple Regression Equations.

UNIT – II Time Series and Forecasting **Hours 16**

Analysis of Time series: Meaning-Uses- Models – Components – Methods of Measuring trends-cyclical variations – Seasonal Variations – Irregular Variations– Trend Analysis- Application of time series analysis to forecasting.

UNIT – IIIProbability and Theoretical Distributions **Hours 20**

Probability Analysis:Meaning-Uses-EventsConcepts- Theorems of Probability – Conditional probability- Bayes Theorem.

Theoretical Distribution: Introduction - **Binomial Distribution**:Meaning-Conditions-Charactristics-Properties and Constants – Fitting of Binomial Distribution - **Poison Distribution**: Meaning-Conditions-Characteristics-Properties-Constants - Fitting of Poison Distribution. **Normal distribution**: Meaning-Characteristics-Properties-Constants – Uses – Fittings.

UNIT – IV Tests of Significance **Hours 18**

Theory of Test of Hypothesis: Meaning-Hypotheses Types - Testing of Significance – Level of Significance – Type I and Type IIError – Degrees of freedom –**Test of Significance for Large Samples**: Test of specified Mean –Tests of significance for Attributes. **Student's 't'distribution** :Meaning-Conditions – Properties-Applications .

UNIT – V Chi-Square Test, F-Test and ANOVA **Hours 16**

Chi – Square Distribution: Meaning-Properties – Applications – Test of goodness of fit – Conditions for the Validity of Chi – Square Test - Testing the Independence of two variables - Yates's Correction

F test: Meaning-Assumptions-Uses-Properties–Applications – Equality of Population Variances. **ANOVA** –Classification- One way Model – Two Way Model.

Pedagogy

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study

Text Books

1. Gupta, S. P. (2020), *Statistical Methods*, Sultan Chand & Sons, New Delhi.
2. Arora, P.N, Sumeet Arora, Arora S (2010), *Comprehensive Statistical Methods*, S. Chand &Co. Ltd, New Delhi.

Reference Books

1. Agarwal, N.P (2017), *Advanced Business Statistics and Mathematics*, RBD Publishing House, New Delhi.
2. Croxton, Cowden & Klein (1973), *Applied General Statistics*, Prentice Hall, New Delhi.
3. John E. Fruend's (2008), *Mathematical Statistics with Applications*, Pearson Education, New Delhi.
4. Kazmier (2006), *Business Statistics*, Schman Series – Mc Graw Hill, New Delhi.
5. Levin, R.I. and Rubin, D.S. (2012), *Statistics for Management*, Prentice-Hall of India.
6. Pal and Sarkar (2008), *Statistical concepts and applications*, PHI Learning, New Delhi

E –Resources

- www.kopykitat.com , Business Statistics, Sharma J.K.Vikas Publishing House.
- www.Amazon.com , Statistics for Management e Book: Levin, Richard I., Rubin, David S.
- Pearson Publishers.
- www.Meripustak.com , Business Statistics , 3E by Beri, McGraw Hill.

Course Outcomes

At the end of the course, students would be able to

CO1	Apply correlation and regression to business problems
CO2	Identify variations and inferences using time series analysis
CO3	Utilize probability distribution for decision making
CO4	Make inferences by developing appropriate Hypothesis
CO5	Make interpretations about the population by applying the tests

Mapping of Programme Specific Outcomes and Course Outcomes

Course Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO 1	3	3	2	2	1	1
CO 2	2	2	2	2	1	1
CO 3	3	3	2	3	2	1
CO 4	3	2	3	2	3	2
CO 5	2	3	3	2	2	1

1 – Low, 2 – Medium & 3- High

Articulation Mapping - K Levels with Course Outcomes (COs)

Units	**COs**	**K – Level**	**Section A**		**Section B**	**Section C**
			MCQs		**Either/or Choice**	**Open Choice**
			No. Of Questions	**K-Level**	**No. Of Questions**	**No. Of Questions**
1	CO1	Up to K2	2	K1 & K2	2(KI&K1)	1(K2)
2	CO2	Up to K3	2	K1 & K2	2(K2&K2)	1(K3)
3	CO3	Up to K3	2	K1 & K2	2(K2&K2)	1(K3)
4	CO4	Up to K3	2	K1 & K2	2(K2&K2)	1(K3)
5	CO5	Up to K4	2	K1 & K2	2(K3&K3)	1(K4)
No of Questions to be asked			10		10	5
No of Questions to be answered			10		5	3
Marks for each Question			1		4	10
Total Marks for each Section			10		20	30

K1 – Remembering and recalling facts with specific answers

K2 – Basic understanding of facts and stating main ideas with general answers

K3 – Application oriented – Solving problems

K4 – Examining, analyzing, presentation and make inferences with evidences

Distribution of Section –wise Marks with K Levels

K Levels	**Section A (No Choice)**	**Section B (Either/or)**	**Section C (Open Choice)**	**Total Marks**	**% of Marks without choice**
K1	5	8	-	13	13
K2	5	24	10	39	39
K3	-	8	30	38	38
K4	-	-	10	10	10
Total Marks	10	40	50	100	

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
I-**Correlation and Regression Analysis**	1.**Correlation**: Meaning, Definition, Uses, Types Methods of Studying Correlation – Graphical Method, Mathematical Method Partial and Multiple Correlation 2.**Regression:** Meaning, Uses, Difference between Correlation and Regression Methods – Graphical Method, Algebraic Method, Standard Error of Estimate Multiple Regression Equations	02 06 02 02 06 02	Descriptive Method/ Power Point Presentation
II-**Time Series Analysis and Forecasting**	1.**Time Series**:Meaning, Definition, Uses Models, Components Measurement of Secular Trend Measurement of Seasonal Variations Measurement of Cyclical Variations Measurement of Irregular Variations 2.**Forecasting**: Application of Time Series Analysis in forecasting	01 01 03 03 03 03 02	Descriptive Method/ Power Point Presentation
III-**Probability and Theoretical Distributions**	1.**Probability:** Meaning, Uses, Events, Types of Events Theorems - Addition and Multiplication Theorem Conditional Probability, Baye's Theorem, Mathematical expectation 2.**Theoretical Distributions:** Meaning, Difference between Theoretical distribution and Observed frequency distribution, Uses **Types** : (i) **Binomial Distribution** - Meaning, Conditions, Characteristics, Properties, Constants Fittings of Binomial Distribution (ii)**Poisson Distribution** - Meaning, Conditions, Characteristics, Constants Fittings of Poisson Distribution (iii) **Normal Distribution** - Meaning, Characteristics, Properties Importance, Constants Standard Normal Probability Curve	02 01 03 01 01 03 02 02 01 01 03	Descriptive Method/ Power Point Presentation
IV-**Test of Significance**	1.**Theory of Test of Hypothesis:** Meaning, Test of Significance, Null Hypothesis, Alternate Hypothesis, Level of Significance, Test Statistic, Critical Region Type I and type II Errors, Degree of Freedom. 2.**Test of Significance of Large Samples:** Test of Specified Mean est of significance for Attributes. 3.**Student's t-Distribution:** Meaning, Conditions, Properties, Characteristics Applications of t distribution.	04 02 03 03 02 04	Descriptive Method/ Power Point Presentation
V- **Chi-Square Test, F Test and ANOVA**	1.**Chi-Square Test:** Meaning, Properties, Constants, Conditions, Yate's Correction, Uses X^2 as a test for Specified Variance X^2 as a test of Independence of Attributes X^2 as a test of Goodness of fit. 2.**F-test:** Meaning, Assumptions, Uses, Properties 3.**ANOVA:** One way analysis, Two way analysis	02 02 02 02 02 03 03	Descriptive Method/ Power Point Presentation

Programme	M.Com	Programme Code	PCO
Course Code	20PCOC25	Number of Hours/ Cycle	6
Semester	II	Max. Mark	100
Part	III	Credit	5
CORE COURSE			
Course Title	Quantitative Techniques		
Cognitive Level	Upto K 4		

Preamble

Quantitative Techniques is designed as an introduction to basic statistical tools and quantitative methods for graduate students in urban planning. These will help the students to become more critical consumers of statistical analyses, and to use statistical reasoning in making decisions. As the foundation for more advanced research methodologies and statistical analyses, this introductory course emphasizes to develop the necessary skills for expressing statistical ideas in clear simple language, which is an essential skill for effective planning professionals.

Unit – I Introduction to Operation Research 16Hours

Operation Research: Origin and Development - Role in decision making- Characteristics - Phases - General approaches.

Unit – II Linear Programming Problem 20 Hours

Linear Programming Problem:Applications and limitations – Formulation of LPP - Graphical and Simplex Method.

Unit – III Transportation and Assignment Problems 18 Hours

Transportation Problems: Balanced and Unbalanced Transportation Problems-Methods for Initial Basic Feasible solution – Degenerate or non Degenerate solution- Moving towards Optimal solutions – MODI method.

Assignment problem: Meaning – Difference between Transportation and Assignment Problem – Hungarian Algorithm.

Unit – IV Replacement Decisions 18 Hours

Replacement: meaning – Reasons for Replacement – types of Replacement - Replacement Decision - Replacement Policy with or without change in money value. Replacement of items that fail completely (Individual and Group replacement).

Unit – V Game Theory and Simulation 18 Hours

Game Theory: Introduction – Types of game – Value of a game – Saddle Point – Problems of mixed strategy – Value of the game – Dominance rule.

Simulation: Introduction-Techniques- Applications-Advantages and Disadvantages – Monte Carlo Simulation – Simulation Problems-Computers in Simulation.

Pedagogy

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study

Text Book

1. Kapoor V.K. (2019), *Operational Research Techniques for Management*., Sultan Chand and Sons, New Delhi.

Reference Books

1. Joseph, (1990), *Business Statistics and Operation Research*, Learn Tec Press, New Delhi.
2. Gupta pk & Man Mohan (2014), Problems in Operation Research, Sultan Chand & Sons,New Delhi.
3. Premkumar Gupta and Hira.D.S(2017), *Operations Research*. S. Chand, New Delhi

E –Resources

- www.Meripustak.com, Operations Research Pundir S K, CBS Publishers and Distributors.
- www.Meritpustak.com, Operations Research an introduction , 10 th edition by Hamdy A Taha.
- www.Kobo.com, Operations Research e Book by H.A.Eiselt, Carl-Louis.

Course Outcomes

At the end of the course, students would be able to

CO1	Recall the general applications of operations research
CO2	Solve linear programming problems using graphical and simplex method
CO3	Apply linear programming problems to transportation and assignment problems
CO4	Analyze and make Replacement decisions for optimization.
CO5	Make use of Game theory and simulation in economic forecasting

Mapping of Programme Specific Outcomes and Course Outcomes

Course Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO 1	1	1	1	1	2	2
CO 2	3	3	2	2	1	2
CO 3	3	3	2	2	2	1
CO 4	2	2	2	2	1	1
CO 5	3	3	1	2	1	1

1 – Low, 2 – Medium & 3- High

Articulation Mapping - K Levels with Course Outcomes (COs)

Units	**COs**	**K – Level**	**Section A**		**Section B**	**Section C**
			MCQs		**Either/or Choice**	**Open Choice**
			No.Of Questions	**K-Level**	**No. Of Questions**	**No. Of Questions**
1	CO1	Up to K2	2	K1 & K2	2(KI&K1)	1(K1)
2	CO2	Up to K3	2	K1 & K2	2(K2&K2)	1(K3)
3	CO3	Up to K3	2	K1 & K2	2(K2&K2)	1(K3)
4	CO4	Up to K4	2	K1 & K2	2(K3&K3)	1(K4)
5	CO5	Up to K3	2	K1 & K2	2(K2&K2)	1(K3)
No of Questions to be asked			10		10	5
No of Questions to be answered			10		5	3
Marks for each Question			1		4	10
Total Marks for each Section			10		20	30

K1 – Remembering and recalling facts with specific answers
K2 – Basic understanding of facts and stating main ideas with general answers
K3 – Application oriented – Solving problems
K4 – Examining, analyzing, presentation and make inferences with evidences

Distribution of Section –wise Marks with K Levels

K Levels	**Section A (No Choice)**	**Section B (Either/or)**	**Section C (Open Choice)**	**Total Marks**	**% of Marks without choice**
K1	5	8	10	23	23**%**
K2	5	24	-	29	29**%**
K3	-	8	30	38	38**%**
K4	-	-	10	10	10**%**
Total Marks	10	40	50	100	

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
I- **Introduction to Operation Research**	1.**Operations Research**: Introduction, Origin and Development, Definition Characteristics Phases Models and Modeling of Operations Research Methodology of Operations Research Applications and Scope of Operations Research Limitations of Operations Research Use of Computer Software in Solving Operations Research Problem	 02 01 03 04 01 02 01 02	Descriptive Method/ Power Point Presentation
II- **Linear Programming Problem**	1.**Linear Programming Problem:** Introduction, Definitions, Basic Terms involved in Simplex Method Computational Aspects of Simplex Method Advantages and Drawbacks of LPP General Model of LPP Application area of LPP Formulation of LPP Graphical Method of Solving LPP Simplex Method – Maximization (Simple and Mixed Constrains), Minimization (Simple and Mixed Constrains)	 02 01 01 01 01 02 04 08	Descriptive Method/ Power Point Presentation
III - **Transportation and Assignment Problems**	1.**Transportation Problem:** Formulating Transportation Models Methods for Initial Basic Feasible solution Test for Optimality Variations in Transportation Problem 2.**Assignment Problem:** Introduction, Mathematical Model Difference between Transportation and Assignment Problem Hungarian Algorithm Special Variations in the Assignment Problems	 01 03 03 03 01 01 03 03	Descriptive Method/ Power Point Presentation
IV- **Replacement Decisions**	1.**Replacement:** Meaning, Reasons for Replacement Types of Replacement Replacement Decision Replacement Policy with or without change in money value Replacement of items that fail completely (Individual and Group replacement) Staff Replacement Problems	 01 02 04 04 04 03	Descriptive Method/ Power Point Presentation
V- **Game Theory and Simulation**	1.**Game Theory:** Introduction, Basic Terminology Solution Methods of Pure Strategy Games Principle of Dominance Solution Methods of Mixed Strategy Games The 2 Person, Non- Zero Sum Game Limitations of Game Theory 2.**Simulation:** Introduction, Definition Methodology for Simulation Advantages and Disadvantages Some Typical Applications Stochastic Simulation Role of Computers in Simulation	 01 01 02 02 02 01 01 01 01 03 02 01	Descriptive Method/ Power Point Presentation

UG COURSES

.

SUMMARY OF HOURS AND CREDITS FOR UG (B.COM) COURSE

FIRST SEMESTER

Part	Code	Subject Name	Hours	Credit
III(Allied)	20UCOA11	Managerial Economics	6	4
		Total	6	4

SECOND SEMESTER

Part	Code	Subject Name	Hours	Credit
III(Allied)	20UCOA21	Economic Development of India	6	4
		Total	6	4

THIRD SEMESTER

Part	Code	Subject Name	Hours	Credit
III(Allied)	20UCOA31	Business Statistics	6	4
		Total	6	4

FOURTH SEMESTER

Part	Code	Subject Name	Hours	Credit
III (Allied)	20UCOA41	Business Mathematics	6	4
		Total	6	4

SUMMARY OF HOURS AND CREDITS FOR UG (B.A. HISTORY) COURSE

FIRST SEMESTER

Part	Code	Subject Name	Hours	Credit
III(Allied)	20UHIA11	General Economics I	6	4
		Total	6	4

SECOND SEMESTER

Part	Code	Subject Name	Hours	Credit
III(Allied)	20UHIA21	General Economics II	6	4
		Total	6	4

Programme	B.Com	Programme Code	UCO
Course Code	20UCOA11	Number of Hours/ Cycle	6
Semester	I	Max. Mark	100
Part	III	Credit	4
ALLIED COURSE			
Course Title	MANAGERIAL ECONOMICS		
Gognitive Level	Upto K 3		

Preamble

Managerial Economics course is an integral part of the composite Bachelor of Commerce programme. The programme is designed to develop theoretical and application skills of students to enable them to be absorbed in the corporate world and pursue higher studies in management, accountancy, commerce and economics. The course in Managerial Economics is designed to equip students with an understanding of the dynamics of economic principles that guide business decision making at micro level.In order to fulfill the above requirements, the course has been designed to include application based topics along with the fundamental theories of microeconomics. Topics like Demand Forecasting, Market Structure and Price determination, Phases of Business cycle, Profit Planning and Control, Break even analysis have been included to develop decision making skills

Unit I Introduction to Managerial economics: **18 Hours**

Meaning – Definition – Nature and Scope – Traditional Economics and Managerial Economics – Importance of Managerial Economics – Role and Responsibilities of a Managerial Economist – Managerial Economics ; An Interdisciplinary Science – Objectives of Modern Business Firms.

Unit II Demand Analysis and Forecasting 18 Hours

Meaning of demand - Law of Diminishing Marginal Utility – Cardinal and Ordinal Concept of Utility – Law of Demand - Shift in demand curve – Elasticity of demand – Types of Elasticity of demand – Managerial uses of the concept of Elasticity of demand - Demand Forecasting – Importance – Methods of demand forecasting for established products and for new products.

Unit III Market structure and Pricing 20 Hours

Market structure ; Perfect Competition – Characteristics – Price output determination -Monopoly – Kinds – Causes - Price Output Determination and price discrimination- Monopolistic competition – Price output decision in short and Long run –Equilibrium - Oligopoly – Features – Dimensions of Pricing – Objectives of Pricing Policy.

Unit IV Inflation - Business Cycle 16 Hours

Inflation – Meaning - Types of inflation -Causes and Effects of inflation – controllingMeasures – Deflation – Meaning – causes and effects – Measures - Business Cycle – Meaning – Definition – Features - Phases of Business Cycle – Causes of Business Cycle –Effects - Anti-cyclical Monetary and Fiscal Measures.

UNIT V Profit Planning and Control 18 Hours

Nature of Profit – Gross Profit and Net Profit - Profit planning – Break Even Analysis – Concepts – Methods of computing BEP – Managerial uses of BEA - Limitations. – Profit Forecasting Techniques.

Pedagogy

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study

Text Books

1. Cauvery, R, Sudhanayak , U.K, Girija, M and Meenakshi R. (2000), *Managerial Economics*, S.Chand & Co., New Delhi.
2. Sankaran, S. (2003), *Managerial Economics*, Margham Publishers, Chennai.

Reference Books

1. Ahuja, H.L. (1998), *Managerial Economics*, Sultan Chand & Co, New Delhi.
2. Dweivedi (1988), *Managerial Economics*, Kalyani Publishers, New Delhi.
3. Jain, T.R (2002), *Managerial Economics*, V.K.Publishers, New Delhi.
4. Jhingan, M.L. (2004), *Managerial Economics*, Sultan Chand & Co, New Delhi.
5. Joel Dean (1982), *Managerial Economics*, Prentice Hall Publishers, New Delhi

E –Resources

- Ps;//m.snapdeal.com, Managerial Economics , Dominick Salvatore Siddhartha K Rastogi.
- Ps;//m.snapdeal.com, Managerial Economics, Eetika Piyalighosh., Purba Roi Choudhury.
- www.Flipkart.com ,Managerial Economics , Jain T.R. VK Global Publications.

Course Outcomes

At the end of the course, students would be able to

CO1	Recall the basic principles and concepts of Managerial economics.
CO2	Describe economic theories related to consumer behavior
CO3	Relate different kinds of market structure and pricing decisions.
CO4	Explain the fluctuations in the economy with exposure on inflation and phases of Business cycle.
O5	Apply Break Even Analysis for profit planning

Mapping of Programme Specific Outcomes and Course Outcomes

Course Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO 1	1	1	1	1	1	1	2	1	1	1	2	1
CO 2	2	-	2	2	2	1	2	1	1	1	2	1
CO 3	2	1	3	2	2	1	1	2	2	1	2	1
CO 4	1	2	2	2	2	1	2	2	2	1	2	1
CO 5	3	2	2	2	2	1	1	2	2	1	2	1

1 – Low, 2 – Medium & 3- High

Articulation Mapping - K Levels with Course Outcomes (COs)

Units	**COs**	**K – Level**	**Section A**		**Section B**	**Section C**
			MCQs		**Either/or Choice**	**Open Choice**
			No. Of Questions	**K-Level**	**No. Of Questions**	**No. Of Questions**
1	CO1	Up to K1	2	K1 & K1	2(KI&K1)	2(K1)
2	CO2	Up to K2	2	K1 & K2	2(K2&K2)	2(K2)
3	CO3	Up to K3	2	K1 & K2	2(K3&K3)	2(K3)
4	CO4	Up to K2	2	K1 & K2	2(K2&K2)	2(K2)
5	CO5	Up to K3	2	K1 & K2	2(K3&K3)	2(K3)
No of Questions to be asked			10		10	5
No of Questions to beanswered			10		5	3
Marks for each Question			1		4	10
Total Marks for each Section			10		20	30

K1 – Remembering and recalling facts with specific answers
K2 – Basic understanding of facts and stating main ideas with general answers
K3 – Application oriented – Solving problems
K4 – Examining, analyzing, presentation and make inferences with evidences

Distribution of Section –wise Marks with K Levels

K Levels	**Section A (No Choice)**	**Section B (Either/or)**	**Section C (Open Choice)**	**Total Marks**	**% of Marks without choice**
K1	6	8	10	24	24**%**
K2	4	16	20	40	40**%**
K3		16	20	36	36**%**
Total Marks	10	40	50	100	

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
I Introduction to Managerial Economics	a) Meaning – Definition –Nature and Scope b) Traditional and Managerial economics – Importance of Managerial economics. c) Role and Responsibilities of a Managerial Economists. d) Managerial Economics – an interdisciplinary Science – Objectives of Modern Business Firms.	6 3 3 6	Descriptive Method/ Power Point Presentation
II Demand Analysis and Forecasting	a) Meaning of demand –Law of Diminishing Marginal Utility – Cardinal and OrdinalConcept, b) Law of demand –shift in demand-Elasticity of demand-Types of elasticity of demand. c) Managerial uses of Elasticity of demand – Demand Forecasting and its importance. d) Methods of demand forecasting for established Products and New Products.	5 6 3 4	Descriptive Method And Assignment
III Market Structure and Pricing	a) Market structure; Perfect Competition - Characteristics –Price output determination. b) Monopoly –kinds - causes- price output determination and price discrimination. c) Monopolistic competition – Price output determination in the short and long runequilibrium d) Oligopoly – features – Dimensions of pricing – Objectives of Pricing .policy.	6 5 5 4	Descriptive Method/ Power Point Presentation And Assignment
IV Inflation Business Cycle	a) Inflation – Meaning – Types of Inflation Causes for Inflation. b) Effect of inflation and controlling measures. c) Deflation – Meaning – Causes and Effects – Controlling Measures. d) Business cycle –Meaning – Definition - Features - Phases of business cycle - Causes of business cycle – Effects – Anti – cyclical Monetary and Fiscal Measures.	4 3 3 6	Descriptive Method/ Power Point Presentation
IV Inflation Business Cycle	a) Inflation – Meaning – Types of Inflation – Causes for Inflation. b) Effect of inflation and controlling measures. c) Deflation – Meaning – Causes and Effects – Controlling Measures. d) Business cycle –Meaning – Definition -Features - Phases of business cycle - Causes of business cycle – Effects – Anti – cyclical Monetary and Fiscal Measures.	4 3 3 6	Descriptive Method/ Power Point Presentation
V Profit Planning And Control	a) Nature of profit – Gross profit and Net profit- Profit Planning – Break even analysis b) Concepts – Methods of computing BEP c) Managerial uses of BEA – Limitations of BEA d) Profit Forecasting techniques	6 6 4 2	Descriptive Method/ Power Point Presentation

As per the TANSCHE Syllabus

Programme	B.Com	Programme Code	UCO
Course Code	20UCOA21	Number of Hours/ Cycle	6
Semester	II	Max. Mark	100
Part	III	Credit	4
ALLIED COURSE			
Course Title	ECONOMIC DEVELOPMENT OF INDIA		
Cognitive Level	Upto K3		

Preamble

This course on Economic Development of India will provide the students of Commerce a thorough understanding and knowledge of basic features of Indian economy, National income, Poverty and Employment Generation Programme. Basic issues in Indian agriculture, industrial structure and services in Indian economy as well as foreign trade is well projected. This paper focus on essential aspects of techniques of planning and its recent adaptations in the light of market dominated strategy .

UNIT I Economic Development and National Income 20 Hours

Economic growth and development – Determinants of economic development – Features of Indian Economy – Barriers to economic development – National Income – Methods of measuring National Income – National Income trends – Difficulties in measuring National Income-Uses of National Income

UNIT II Population, Poverty and Unemployment 20 Hours

Features of India's Population – Causes for rapid growth of population –Population Explosion and its consequences – Remedial measures to control population – Malthusian Theory of Population – Optimum Theory of Population. Poverty; Absolute and Relative poverty - - causes of poverty – poverty alleviation programme. Unemployment – causes of unemployment – Short term and long term remedies.

UNIT III Agriculture 15 Hours

Agriculture and its role in economic development –Agricultural productivity- causes for low agricultural productivity in India- Government Measures – Green Revolution – Features – Benefits of Green Revolution – Agricultural Price policy - Objectives – Instruments of price policy- defects -Food Security in India.

UNIT IV Industries 15 **Hours**

Importance of industrialization in India –Role of MSMEs and large scale industries-Problems of MSMEs - Remedial Measures - Industrial Policies of 1948, 1956, 1982 and 1991 New Industrial Policy – its defects - Recent changes- Role of Public sector in India – Problems of public sector undertakings – Concept of Privatization – Arguments for and against Privatization- Disinvestment

UNIT VBanking, Foreign Trade and Planning 20 Hours

Commercial Banks and its role in Economic development – Functions and role of RBI – India's Foreign trade – Direction and Composition of foreign trade -Balance of Trade – Balance of Payment – causes for disequilibrium inn Balance of Payment - – Export Promotion Measures – Role of EXIM Bank - India's Five year plans – objectives – XII Five year Plan – NITI Aayok – Digital India Mission.

Pedagogy

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study

Text Books

1 Sankaran (2003), *Indian Economic Problems*, Margham Publishers, Chennai.

2 . Dutt and Sundharam (2000), *Indian economy*, S Chand & Co, New Delhi.

Reference Books

1. Agarwal.A.N. (2004),*Indian Economy*, Wishwa Prakashan, New Delhi.
2. Ahulwalia.I.J. and I.M.D.Little (eds.) (1999), *India's Economic Reforms and Development*. (Essays in honour of Manmohan /Singh), Oxford University Press, New Delhi.
1. Dhingra.C (2003), *The Indian Economy*, Sultan & Chand, New Delhi.

E –Resources

- www.Flipkart.com ,The Indian Economy , Sanjiv Verma .Unique Publications.
- www.Flipkart.com ,The Indian Economy , Paul Krugman , RobinWell,W H Freeman & Co Limited.
- www.Flipkart.com , Indian Economy, Remesh Singh , Tata McGraw – Hill Education India.

Course Outcomes

At the end of the course, students would be able to

CO1	Associate economic development with trends and measures of national income
CO2	Relate the effect of population, poverty and unemployment on economic development
CO3	Explain the role of agriculture in nation's development
CO4	Enumerate the performance of India's Industrial development and Public Sector Undertakings since independence.
CO5	Summarize the role of service sector in economic development and estimate the performance in India's Five year Plans.

Mapping of Programme Specific Outcomes and Course Outcomes

Course Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO 1	2	2	2	2	1	1	2	2	2	1	2	1
CO 2	3	3	2	2	3	1	1	2	2	1	2	1
CO 3	2	2	2	2	2	1	3	2	2	1	2	1
CO 4	1	1	1	1	1	1	1	1	1	1	2	1
CO 5	2	2	2	2	2	1	2	2	2	1	2	1

1 – Low, 2 – Medium & 3- High

Articulation Mapping - K Levels with Course Outcomes (COs)

Units	**COs**	**K – Level**	**Section A**		**Section B**	**Section C**
			MCQs		**Either/or Choice**	**Open Choice**
			No. Of Questions	**K-Level**	**No. Of Questions**	**No. Of Questions**
1	CO1	Up to K2	2	K1 & K2	2(K2&K2)	1(K2)
2	CO2	Up to K3	2	K1 & K2	2(K3&K3)	1(K2)
3	CO3	Up to K3	2	K1 & K2	2(K3&K3)	1(K3)
4	CO4	Up to K1	2	K1 & K1	2(K1&K1)	1(K1)
5	CO5	Up to K2	2	K1 & K2	2(K2&K2)	1(K2)
No of Questions to be asked			10		10	10
No of Questions to be answered			10		5	3
Marks for each Question			1		4	10
Total Marks for each Section			10		20	30

K1 – Remembering and recalling facts with specific answers
K2 – Basic understanding of facts and stating main ideas with general answers
K3 – Application oriented – Solving problems
K4 – Examining, analyzing, presentation and make inferences with evidences

Distribution of Section –wise Marks with K Levels

K Levels	**Section A (No Choice)**	**Section B (Either/or)**	**Section C (Open Choice)**	**Total Marks**	**% of Marks without choice**
K1	6	8	10	24	24**%**
K2	4	16	30	50	50**%**
K3		16	10	26	26**%**
K4					
Total Marks	10	40	50	100	

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
I Economic Development and National Incom	a) Economic growth and development – Determinants of economic development- Features f Indian economy. c) Barriers to economic development – National income – Methods of MeasuringNational income. d) National income trends – Difficulties in Measuring National income- Uses of National income estimates.	8 6 6	Descriptive Method/ Power Point Presentation
II Population, Poverty, Unemployment	a) Features of India's Population – Causes for rapid growth of population – Population explosion and its consequences. e) Remedial measures to control population- Malthusian Theory of population –Optimum Theory of population. f) Poverty – Absolute and Relative poverty – Causes of poverty – Poverty Alleviation Programme. g) Unemployment – Causes of unemployment Types of unemployment - Short term and Long term remedies.	6 4 5 5	Descriptive Method And Assignment
III Agriculture	h) Agriculture and its role in economic development – Agricultural productivity – Causes for low agricultural productivity in India – b) Government's Measures – Green Revolution - Features of Green Revolution – Benefits of Green Revolution. i) Agricultural Price Policy- Objectives – Instruments of price policy –defects –Food Security in India.	5 5 5	Descriptive Method And Assignment
IV Industries	a) Importance of Industrialization in India – Role of MSMEs and Large scale industries- Problems of MSMEs –Remedial measures. j) Industrial Policies of 1948,1956,1982 and 1991 New Industrial Policy – its defects – Recent changes. k) Role of Public sector in India – Problems of public sector undertakings – Concept of Privatization – Arguments for and against Privatization- Disinvestment.	5 5 5	Descriptive Method And Assignment
V Banking, Foreign Trade, Planning.	l) Commercial banks and its role in economic development- Functions and Role of RBI – m) India's Foreign Trade – Direction and Composition – Balance of Trade and Balance of Payments – n) Disequilibrium in Balance of Payment - causes – Export Promotion Measures-Role of EXIM Bank. o) India's Five Year Plans – Objectives – XII Five Year Plan –NITI Aayok - Digital India Mission.	5 4 5 6	Descriptive Method/ Power Point Presentation

Programme	**B.A.(History)**	**Programme Code**	**UHI**
Course Code	**20UHIA11**	**Number of Hours/ Cycle**	**6**
Semester	**I**	**Max. Mark**	**100**
Part	**III**	**Credit**	**4**
ALLIED COURSE			
Course Title	**GENERAL ECONOMICS – I**		
Cognitive Level	**Upto K 3**		

Preamble

Economics is a subject which is very much relevant to our life. Through this course the students will be able to explore the relevance of various aspects of microeconomics with our day to day activities. The knowledge about the concepts of demand, supply, elasticity of demand, consumer surplus, demand forecasting will enable them to understand the actual market trends, predict for the future and take the business decisions accordingly. The knowledge of various market structures will make them understand business well and enable them to take the business decisions efficiently.

Unit-I Scope and Methodology of Micro Economics 20 Hours

Meaning – Difference between Micro and Macro Economics – Main Divisions in Economics - Definition of Economics – Adam Smith - Marshall - Robbins -- Samuelson – Economics Science or Art - Normative or Positive - Methodology of Economics ; Deductive Method and Inductive Method – Nature of Economic Laws – Human Wants and its Characteristics.

Unit-IITheory of Consumer Behavior 20 **Hours**

Utility - Cardinal Utility - Law of Diminishing Marginal Utility - Law of Equi-Marginal utility - - Law of Demand - Law of Supply. Shift in the Demand Curve- Elasticity of Demand and its kinds; Price Elasticity of Demand - Income Elasticity of Demand - Cross Elasticity of Demand – Factors influencing Elasticity of Demand – Methods of Measuring of Elasticity of Demand - Uses of Elasticity of Demand - Consumer's Surplus–Applications of consumer's Surplus.

Unit-III Theory of Production 17 Hours

Factors of Production -Characteristic features of land, Labor, Capital and Organization – Laws of Returns – Law of Variable Proportion – Division of Labor – Labor Productivity – Localization of Industries –Theories of Population – Malthusian Theory, Optimum Population Theory, Theory of Demographic Transition – Population and Economic Development.

Unit-IV Economic Organization17Hours

Capital Formation – Role of Capital Formation in Economic Development – Sources of Capital Formation – Reasons for low Capital Formation -Domestic and Foreign Capital – Importance of Foreign Capital –Physical Capital and Human Capital -Meaning and functions of Entrepreneur.. Qualities of a good Entrepreneur. Forms of business organizations ; individual Entrepreneur – Partnership Firm – joint Stock Company – Cooperative Enterprise – State Enterprises.

Unit-VMARKET STRUCTURE AND PRICING16Hours

Cost and Revenue Concepts – Nature of cost curves and Revenue curves – Short run and Long run cost curves - Perfect Competition – Feature – Price output determination. Monopoly – causes for Monopoly – Kinds of monopoly –Price output determination - Measures to check Monopoly. Monopolistic Competition – Features – Price and output determination –Wastages under Monopolistic Competition. Oligopoly an its features – Effects of Oligopoly – Evils of Oligopoly

Pedagogy

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study

Text Book

1. S.Sankaran (1991) *Economic Analysis*, Margham Publications, Madras.

Reference Books

1. Ahuja H.L. (1996) , *Principles of Micro Economics*, A New look at Economic Theory, S.Chand and Company, New Delhi.
2. Dewett K.K (2009), *Micro Economics*, S.Chand and Company, New Delhi.
3. Jhingan M.L, (2008) *Micro Economic Theory*, Konark Publishers, New Delhi

Course Outcomes

At the end of the course, students would be able to

	Course Outcome
CO1	Recall the fundamental concepts and principles of economics
CO2	Associate the behavioral analysis of consumer through cardinal utility analysis
CO3	Explain the Production function and its related theories
CO4	Interpret the importance of capital and the functions of entrepreneur.
CO5	Illustrate different Cost curves and Revenue curves and price determination under different markets.

Mapping of Programme Specific Outcomes and Course Outcomes

Course Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO 1	1	2	1	1	1	2	-	1	2	1	2	1
CO 2	1	2	1	1	2	2	-	2	2	1	2	1
CO 3	1	2	1	2	2	2	-	2	2	1	2	1
CO 4	1	2	2	2	2	2	-	2	2	1	2	1
CO 5	1	2	2	2	2	2	-	2	2	1	2	1

1 – Low, 2 – Medium & 3- High

Articulation Mapping - K Levels with Course Outcomes (COs)

Units	**COs**	**K – Level**	**Section A**		**Section B**	**Section C**
			MCQs		**Either/or Choice**	**Open Choice**
			No. Of Questions	**K-Level**	**No. Of Questions**	**No. Of Questions**
1	CO1	Up to K1	2	K1 & K1	2(KI&K1)	1(KI)
2	CO2	Up to K2	2	K1 & K2	2(K2&K2)	1(K2)
3	CO3	Up to K3	2	K1 & K2	2(K3&K3)	1(K3)
4	CO4	Up to K2	2	K1 & K2	2(K2&K2)	1(K2)
5	CO5	Up to K3	2	K1 & K2	2(K3&K3)	1(K3)
No of Questions to be asked			10		10	5
No of Questions to be answered			10		5	3
Marks for each Question			1		4	10
Total Marks for each Section			10		20	30

K1 – Remembering and recalling facts with specific answers
K2 – Basic understanding of facts and stating main ideas with general answers
K3 – Application oriented – Solving problems
K4 – Examining, analyzing, presentation and make inferences with evidences

Distribution of Section –wise Marks with K Levels

K Levels	**Section A (No Choice)**	**Section B (Either/or)**	**Section C (Open Choice)**	**Total Marks**	**% of Marks without choice**
K1	6	8	10	24	24**%**
K2	4	16	20	40	40**%**
K3		16	20	36	36**%**
K4					
Total Marks	10	40	50	100	

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
I Scope and Methodology of Micro – Economics	a) Meaning – Difference between Micro and Macro Economics - Main Divisions in Economics- Definitions of Economics – Adam Smith – Alfred Marshall b) Lionel Robins – Paul Samuelson EconomicsScience or Arts – Normative or Positive , c) Methodology of Economics ; DeductiveMethod and Inductive Method – Nature ofEconomic Laws – Human wants and its Characteristics.	7 6 7	Descriptive Method And Assignment
II Theory of Consumer Behavior	a) Utility–Cardinal Utility – Law of DiminishingMarginal Utility –Law of demand – Law ofSupply- Shift in the demand curve. b) Elasticity of Demand and its kinds ; Pricez Elasticity-Inceme Elasticity and CrossElasticity of demand - Factors influencing Elasticity of demand/ c) Methods of Measuring Elasticity of demand – Uses of Elasticity of demand – Consumer's Surplus – Application of Consumer's Surplus.	6 7 7	Descriptive Method/ Power Point Presentation
III Theory of Production	a) Factors of Production- Characteristic features of Land, Labor, Capital and Organization – Laws of Return – Law of Variable Proportion. b) Division of Labor – Labor Productivity – Localization of industries. c) Theories of Population- Malthusian Theory – Optimum Population Theory- Theory of Demographic Transition – Population and Economic development.	7 4 6	Descriptive Method And Assignment
IV Economic Organization	a) Capital Formation –Role of Capital Formationin economic development-Sources of capital Formation- Domestic and Foreign capital –Reasons for low domestic capital. b) importance of Foreign Capital-PhysicalCapital and Human Capital – Meaning and Functions of Entrepreneurs – qualities of a Good Entrepreneur. c) Forms of business organizations – individual Entrepreneur – Partnership Firm – joint Stock Company – Cooperative Enterprise – StateEnterprise/	6 6 5	Descriptive Method And Assignment
V Market Structure and Pricing	a) Cost and Revenue Concepts – Nature of costcurves and Revenue curves – Short run and Long run cost curves. b) Perfect Competition – Feature – Price output Determination. Monopoly – causes forMonopoly – Kinds of monopoly –Price output Determination- Measures to check Monopoly. c) Monopolistic Competition – Features – Price and output determination –Wastages underMonopolistic Competition. Oligopoly and Its features –Effects of Oligopoly – Evils of Oligopoly.	5 6 5	Descriptive Method/ Power Point Presentation

Programme	**B.A.(History)**	**Programme Code**	**UHI**
Course Code	**20UHIA21**	**Number of Hours/ Cycle**	**6**
Semester	**II**	**Max. Mark**	**100**
Part	**III**	**Credit**	**4**
Allied			
Course Title	**GENERAL ECONOMICS – II**		
Cognitive Level	**Upto K 3**		

Preamble

General Economics II is based on Macro economics. On account of the growing influence and involvement of the State in economic fields, macroeconomics has become a major area of economic analysis in terms of theoretical, empirical as well as policy-making issues. Macroeconomics has an extensive, substantive as well as methodological content. It deals with the functioning of the economy as a whole, the objective of the course is to familiarize the students the basic concept of Macro Economics and application. Macro economics has an extensive, substantive as well as methodological content. It deals with the functioning of the economy as a whole, including how the economy's total output of goods and services and employment of resources is determined and what causes these totals to fluctuate. The Paper is designed to make an undergraduate student aware of the basic theoretical framework underlying the field of macroeconomics.

UNIT I ECONOMIC DEVELOPMENT AND NATIONAL INCOME 20 Hours

Economic growth and development – Determinants of economic development – Features of Indian Economy – Barriers to economic development – National Income – Methods of measuring National Income – National Income Trends - – Difficulties in measuring National Income – Uses of National Income estimates.

UNIT II MONEY AND BANKING 18 Hours

Definition - Functions of money – Quantity theory of money –Transaction Approach – Cambridge version – Role of money in capitalist and Socialist economies – Commercial bank and its Functions -Role of Commercial Banks in Economic Development. Central Bank and its Functions – Role of Central Bank in Economic Development- Monetary Policy and its Objectives.

UNIT III INTERNATIONAL TRADE 18 Hours

Difference between internal and international trade – Importance of International Trade- Theories of International Trade ; Comparative cost Theory – Purchasing Power Parity Theory - General equilibrium Theory – Balance of Trade - Balance of payment –Causes for disequilibrium – measures for correcting disequilibrium in balance of payments – Free Trade Policy – Merits and Demerits - Protection Trade Policy – Arguments for and against. WTO and its Function.

UNIT IV INFLATION & TRADE CYCLE 16 Hours

Meaning and kinds of inflation – causes and effect of inflation - measures to correct inflation - deflation – causes – stagflation – trade cycle – components – Anti-cyclical Monetary policy – objectives.

UNIT V PUBLIC REVENUE & PUBLIC EXPENDITURE 18 Hours

Cannon of taxation – direct tax and indirect tax – sources of public revenue –Suggestions for increasing public revenue – causes for the growth of public expenditure in India – features and preparation of budget – public debt and methods of redemption - NITI Aayok

Pedagogy

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study

Text Book

1. Sankaran, S. (2003), *Economic Analysis,* Margham Publishers, Chennai.

Reference Books

1 .Ahuja.HL (2014), *Principles of Economics*, Sultan Chand Publishing, New Delhi
2 .Seth, M.L. (1992), *Principles of Economics,* S Chand & Co., New Delhi.
3 .Sundaram, K.P.M (1995), *Money, Banking, Trade & Finance*, Sultan Chand & Sons., New Delhi

Course Outcomes

At the end of the course, students would be able to

CO1	Relate the measures of National Income with economic development.
CO2	Classify the functions of Money and the role ofBanks in economic development.
CO3	Summarize the importance of international trade, trade policy and theories.
CO4	Interpret the impact of inflation, deflation and the phases of trade cycle.
CO5	Explain the trends of public revenue and public expenditure in India

Mapping of Programme Specific Outcomes and Course Outcomes

Course Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO 1	2	2	1	1	2	1	-	2	1	1	2	1
CO 2	1	1	1	1	1	1	-	1	1	1	2	1
CO 3	2	2	1	1	2	1	-	2	1	1	2	1
CO 4	2	2	-	1	2	1	-	2	1	1	2	1
CO 5	2	2	1	1	2	1	-	2	1	1	2	1

1 – Low, 2 – Medium & 3- High

Articulation Mapping - K Levels with Course Outcomes (COs)

Units	**COs**	**K – Level**	**Section A**		**Section B**	**Section C**
			MCQs		**Either/or Choice**	**Open Choice**
			No. Of Questions	**K-Level**	**No. Of Questions**	**No. Of Questions**
1	CO1	Up to K2	2	K1 & K2	2(K2&K2)	1(K2)
2	CO2	Up to K1	2	K1 & K1	2(K1&K1)	1(K1)
3	CO3	Up to K2	2	K1 & K2	2(K2&K2)	1(K2)
4	CO4	Up to K2	2	K1 & K2	2(K2&K2)	1(K2)
5	CO5	Up to K3	2	K1 & K2	2(K3&K3)	1(K3)
No of Questions to be asked			10		10	5
No of Questions to be answered			10		5	3
Marks for each Question			1		4	10
Total Marks for each Section			10		20	30

K1 – Remembering and recalling facts with specific answers
K2 – Basic understanding of facts and stating main ideas with general answers
K3 – Application oriented – Solving problems
K4 – Examining, analyzing, presentation and make inferences with evidences

Distribution of Section –wise Marks with K Levels

K Levels	**Section A (No Choice)**	**Section B (Either/or)**	**Section C (Open Choice)**	**Total Marks**	**% of Marks without choice**
K1	6	8	10	24	24**%**
K2	4	24	30	58	58**%**
K3	-	8	10	18	18**%**
K4	-	-	-		
Total Marks	10	40	50	100	

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
I Economic Development and National Income	a) Economic growth and development Determinants of economic developmentFeatures f Indian economy. b) Barriers to economic development –National income – Methods of MeasuringNational income. p)National income trends – Difficulties in Measuring National income- Uses of National income estimates.	8 6 6	Descriptive Method/ Power Point Presentation
II Money and Banking	a) Definition - Functions of Money – Quantity Theory of Money – Transaction Approach – Cambridge Version – Role of Money inCapitalistic and Socialistic Economies. b) Commercial Banks and its Functions -Role of Commercial Banks in EconomicDevelopment. c) Central Bank and its Functions – Role of Central Bank in Economic Development - Monetary Policy and its Objectives.	7 5 6	Descriptive Method And Assignment
III International Trade	a) Difference between Internal and Inter – National Trade- Importance of Inter-National Trade- Theories of InternationalTrade; Comparative Cost Theory-PurchasingPower Parity Theory – General EquilibriumTheory. b) Balance of Trade – Balance of Payment – Causes for disequilibrium in Balance of Payment –Corrective Measures, c) Free Trade Policy – Merits and demerits- Protection Trade Policy – Arguments for andAgainst – WTO and its Function.	8 5 5	Descriptive Method And Assignment
IV Inflation – Trade Cycle	a) Inflation – Meaning – Types of Inflation – Causes for Inflation. b) Effect of inflation and controlling measures. c) Deflation – Meaning – Causes and Effects – Controlling Measures. d) Business cycle –Meaning – Definition - Features - Phases of business cycle - Causes of business cycle – Effects –Anti – cyclicalMonetary and Fiscal Measures.	4 3 3 6	Descriptive Method/ Power Point Presentation
V Public Revenue and Public Expenditure	a) Causes for the growth of Public Expenditure- Revenue and expenditure of the Central andState Government. b) Cannons of Taxation – Direct and indirect Taxes ; Merits and demerits – Incidence ofTaxation. c) Public Debt – Need for Public debt – Types of Public debt – Burden of Public debt both internal and external - Redemption of public Debt. d) Budget – types of budget – Preparation and Presentation – Features of a good budge	5 5 5 3	Descriptive Method And Assignment

As per the TANSCHE Syllabus

Programme	**B.Com**	**Programme Code**	**UCO**
Course Code	**20UCOA31**	**Number of Hours/Cycle**	**L** 5 **T** 1
Semester	**III**	**Max. Marks**	**100**
Part	**III**	**Credit**	**4**
CORE COURSE			
Course Title	**Business Statistics**		
Cognitive Level		**Up to K3**	

Preamble

This course is designed to provide students with an understanding of the need for the Primary data and Secondary data, how they are collected, tabulated and presented. It illustrates the role of Measures of Central Tendency and Dispersion in Statistics. It educates the students about the Correlation, Regression, Index number and Time Series Analysis in Statistics.

Unit I	**Data and Presentation of Data**	**18 Hours**
	Introduction: Introduction to Statistics- Meaning and Definition – Functions – Importance – Data collection – Sources – Primary-Secondary – Techniques – Census – Sampling – Classification – Presentation – Tabulation – Diagrammatic Representation – Graphical presentation	
Unit II	**Measures of Central Tendency and Dispersion**	**20 Hours**
	Measures of Central Tendency: Arithmetic mean – Combined mean – Median – Mode – Geometric mean – Harmonic mean **Measure of Variations:** Introduction - Range – Mean deviation –Quartile deviation – Variance - Standard deviation – Combined Standard deviation – Co-efficient of Variation – Skewness – Kurtosis	
Unit III	**Correlation and Regression Analysis**	**20 Hours**
	Correlation: Concept, Types and uses - Methods of studying correlation – Scatter diagram – Graphic method – Karl Pearson's Co-efficient of Correlation, Rank Correlation, Concurrent deviation method **Regression analysis:** Concept – Relation between Correlation and Regression - Regression equations – Least square method – Deviations taken from actual mean and assumed mean method	
Unit IV	**Index Number**	**16 Hours**
	Meaning – Features – Classification of index numbers – Construction of index numbers – Various Price and Quantity index number – Consumer price index number	
Unit V	**Time Series**	**16 Hours**
	Analysis of time series – components – Methods of determining trend – Graphical Method – Semi average method – Moving Average Method – Method of Least Square – Measurements Seasonal Variations – method of simple average only	
Instruction for framing Question Paper (Problems – 60% and Theory – 40 %)		

Pedagogy

Class Room Lectures, Power point presentation, Peer Learning, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study.

Text Book

1. Pillai R. S. N.and Bagavathi, V. (2019), *Statistics theory and Practice*, S Chand & Co, New Delhi.
2. Gupta, S. P. (2020), *Statistical - Methods*, S Chand & Co, New Delhi.

Reference Books

1. Gupta, C. B. (2011), *Statistical Methods*, Sultan Chand & Co, New Delhi.
2. Srivatstava T N and Shailaja Rego (2010), *Statistics for Management*, Tata McGrew Hill Education Private Limited, New Delhi.
3. James T. McClave (2013), *Statistics for Business and Economics*, Pearson Publisher, New Delhi.
4. Richars I. Levine (2014), *Business Statistics*, Prentice Hall Publihers, New Delhi.
5. Dr. Sancheti D C and Kapoor V K (2003), *Statistics (Theory, Methods & Application)*, Sultan Chand & Sons, New Delhi.

E-Resources

- www.toppr.com
- www.wrps.org
- www.managementstudyguid.com
- www.datasciencecentral.com
- www.economicsdiscussion.net
- www.statisticssolutions.com

Course Outcomes
(After completion of this course, the students will be able to)

CO1	Interpret the Data and Presentation of Data.	K2
CO2	Illustrate the Measures of Central Tendency and Identify the Measures of Dispersion.	K3
CO3	Apply and Interpret the Correlation Co-efficient and Simple Linear Regression Analysis in the business context.	K3
CO4	Construct Simple, Weighted and Cost of Living Index Numbers.	K3
CO5	Utilize the models of Time Series to forecast the business trend.	K3

Mapping of Course Outcomes (COs) with Programme Specific Outcomes

	PSO 1	PSO2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO 1	2	3	3	3	2	2	1	2	2	1	1	1
CO 2	2	3	3	3	2	2	1	2	2	1	1	1
CO 3	2	3	3	3	2	2	1	2	2	1	1	1
CO 4	2	3	3	3	2	2	1	2	2	1	1	1
CO 5	2	3	3	3	2	2	1	2	2	1	1	1

3. High; 2. Moderate ; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs) (Model)

Units	COs	K-Level	Section A		Section B	Section C
			MCQs		Either/ or Choice	Open Choice
			No. Of Questions	K-Level	No. Of Question	
1	CO1	Up to K2	2	K1&K1	2(K1&K1)	1(K2)
2	CO2	Up to K3	2	K1&K2	2(K2&K2)	1(K3)
3	CO3	Up to K3	2	K1&K2	2(K2&K2)	1(K3)
4	CO4	Up to K3	2	K1&K2	2(K2&K2)	1(K2)
5	CO5	Up to K3	2	K1&K2	2(K2&K2)	1(K3)
No of Questions to be asked			10		10	10
No of Questions to be answered			10		5	3
Marks for each Question			1		6	10
Total marks for each Section			10		20	30

K1 – Remembering and recalling facts with specific answers
K2 – Basic understanding of facts and stating main ideas with general answers
K3 – Application oriented – Solving problems

Distribution of Section - wise Marks with K Levels (Model)

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks without Choice
K1	6	8	-	14	14
K2	4	32	20	56	56
K3	-	-	30	30	30
Total Marks	10	40	50	100	100

Lesson Plan

Unit I	**Data and Presentation of Data**	**Hours**	**Mode**
	a. Statistics	**1**	Class Room Lecture/ Seminar/ Power Point Presentation / Peer Learning /Problem Solving
	b. Meaning and Definition	**1**	
	c. Functions	**1**	
	d. Importance	**1**	
	e. Data collection	**2**	
	f. Sources	**1**	
	g. Primary data	**1**	
	h. Secondary data	**1**	
	i. Techniques	**1**	
	j. Census	**1**	
	k. Sampling	**1**	
	l. Classification	**2**	
	m. Presentation	**1**	
	n. Tabulation	**1**	
	o. Diagrammatic Representation	**1**	
	p. Graphical Presentation	**1**	
Unit II	**Measures of Central Tendency and Dispersion**	**Hours**	**Mode**
	a. Arithmetic mean	**2**	Class Room Lecture/ Seminar/ Power Point Presentation / Peer Learning /Problem Solving
	b. Combined mean	**1**	
	c. Median	**1**	
	d. Mode	**2**	
	e. Geometric mean	**2**	
	f. Harmonic mean	**2**	
	g. Range	**1**	
	h. Quartile deviation	**2**	
	i. Mean deviation	**2**	
	j. Standard deviation	**2**	
	k. Combined Standard deviation	**1**	
	l. Co-efficient of Variation	**2**	
Unit III	**Correlation and Regression Analysis**	**Hours**	**Mode**
	a. Correlation	**1**	Class Room Lecture/ Seminar/ Power Point Presentation / Peer Learning /Problem Solving
	b. Meaning, Types and uses	**2**	
	c. Methods of studying correlation	**1**	
	d. Scatter diagram	**2**	
	e. Graphic method	**2**	
	f. Karl Pearson's Co-efficient of Correlation	**1**	
	g. Rank Correlation	**2**	
	h. Concurrent deviation method	**1**	
	i. Regression analysis	**2**	
	j. Relation between Correlation and Regression	**1**	
	k. Regression equations	**1**	
	l. Least square method	**2**	
	m. Deviations taken from actual mean and assumed mean method	**2**	
Unit IV	**Index Number**	**Hours**	**Mode**
	a. Meaning	**2**	Class Room Lecture/ Seminar/ Power Point Presentation / Peer Learning /Problem Solving
	b. Features	**2**	
	c. Classification of index numbers	**3**	
	d. Unweighted index numbers	**1**	
	e. Weighted index number	**2**	
	e. Various Price & Quantity index number	**4**	
	f. Consumer price index number	**2**	

Programme	**B.Com**	**Programme Code**	**UCO**
Course Code	**20UCOA41**	**Number of Hours/Cycle**	**L** 5 **T** 1
Semester	**IV**	**Max. Marks**	**100**
Part	**III**	**Credit**	**4**
CORE COURSE			
Course Title	**Business Mathematics**		
Cognitive Level		**Up to K3**	

Course designed by Dr. P. Ravichandran, Associate Professor of Economics.

Preamble

The course on Business Mathematics illustrates the Arithmetic Applications of Mathematics, Basic applications of mathematical reasoning. It means the role of Set theory, Algebra, Differential, Integral Calculus and Matrices in solving business problems. It also educates the significance of Mathematics in giving solutions to problems frequently arising in the business.

Unit I	**Basic Mathematical Concepts**	**18 Hours**
	Ratios and Proportions– Basic laws of ratios, Proportions – Continued, Direct, inverse, Compound, Mixed proportions (Time and work only) – Variation – Percentage – Application in business and commerce	
Unit II	**Theory of Sets**	**16 Hours**
	Elements of set Theory – Definition – Symbols – Roster method and Rule method – Types of sets – Union and Intersection – Sub sets – Complements – Difference of two sets – Family of Sets – Venn diagram – De-Morgon's law	
Unit III	**Mathematics for Finance**	**18 Hours**
	Interest – Simple – Compound – Normal rate – Effective rate – Types of annuities – immediate, due, deferred, continuous, perpetual and their future and present values – Present value – Discounting of bills – Face value of bills – Banker's discount – Banker's gain – Normal due date – Legal due date – Calculation of period for banker's discount and true discount	
Unit IV	**Calculus**	**20 Hours**
	Differential calculus (excluding trigonometric functions) – Rules – Sum rule – Product rule - Quotient rule, functions of a function rule (Simple problems only) – Maxima and Minima (Single variable cases) – Methods of integral calculus – Rules (Excluding integration by parts of Fractions) – Simple problems only	
Unit V	**Matrices**	**18 Hours**
	Introduction - Types of Matrices - Addition, Subtraction and Multiplication – Properties – Determinants - Matrix Inversion Techniques - Solving a system of linear equation using matrix inversion - Rank of matrix - Testing consistency of equations	
Instruction for framing Question Paper (Problems – 70% & Theory – 30 %)		

Pedagogy

Class Room Lectures, Power point presentation, Peer Learning, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study.

Text Book

1. Manoharan, M. and Elango, C. (2019), *Business Mathematics*, Palani Paramount Publishers, Palani.
2. Vittal, P.R. (2019), *Business mathematics*, Margham Publications, Chennai.

Reference Books

1. Sancheti, D.C. and Kapoor, V.K. (2021), *Business Mathematics*, Sultan Chand & Co, New Delhi.
2. Jeyaseelan and Sundaresan (2015), *Business Mathematics*, S Chand & Co, New Delhi.
3. Ranganathan, G. K. (2014), *Business Mathematics*, Girija Publishers, Chennai.
4. Sharma, J. K. (2016), *Business Mathematics*, I.K. International Publishing House Pvt. Ltd, New Delhi.
5. Singh, J. K. (2013), *Business Mathematics*, Himalaya Publishing House, New Delhi.

E-Resources

- www.toppr.com
- www.smallbusiness.chron.com
- www.educba.com
- www.oreilly.com
- www.brainkart.com
- www.scribd.com

Course Outcomes

After completion of this course, the students will be able to:

CO1	Discuss the various mathematical applications.	K2
CO2	Acquire the basic arithmetic operations on set theory.	K2
CO3	Understanding the basic meaning in the areas of elementary function and financial mathematics.	K2
CO4	Solving business problems by applying various mathematical tools including Differential and Integral Calculus.	K3
CO5	Utilize the contributions of matrices for the business.	K3

Mapping of Course Outcomes (COs) with Programme Specific Outcomes

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	2	3	3	3	2	1	1	1	2	1	1	1
CO2	2	3	3	3	2	1	1	1	2	1	1	1
CO3	2	3	3	3	2	1	1	1	2	1	1	1
CO4	2	3	3	3	2	1	1	1	2	1	1	1
C05	2	3	3	3	2	1	1	1	2	1	1	1

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs) (Model)

Units	COs	K-Level	Section A		Section B	Section C
			MCQs		Either/ or Choice	Open Choice
			No. Of Questions	K-Level	No. Of Questions	No of Questions
1	CO1	Up to K2	2	K1&K1	2(K2&K2)	1(K2)
2	CO2	Up to K2	2	K1&K1	2(K1&K1)	1(K2)
3	CO3	Up to K2	2	K1&K1	2(K1&K1)	1(K2)
4	CO4	Up to K3	2	K2&K2	2(K2&K2)	1(K3)
5	CO5	Up to K3	2	K1&K2	2(K2&K2)	1(K3)
No of Questions to be asked			10		10	5
No of Questions to be answered			10		5	3
Marks for each Question			1		4	10
Total marks for each Section			10		20	30

K1 – Remembering and recalling facts with specific answers
K2 – Basic understanding of facts and stating main ideas with general answers
K3 – Application oriented – Solving problems

Distribution of Section - wise Marks with K Levels (Model)

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks without Choice
K1	7	16	-	23	23
K2	3	24	30	57	57
K3	-	-	20	20	20
Total Marks	10	40	50	100	100

Lesson Plan

Unit I	**Basic Mathematical Concepts**	**Hours**	**Mode**
	a. Ratios	**2**	Class Room Lecture/ Seminar/ Power Point Presentation / Peer Learning /Problem Solving
	b. Basic laws of ratios	**1**	
	c. Proportions -Types	**2**	
	d. Continued proportions	**1**	
	e. Direct proportions	**1**	
	f. Inverse proportions	**1**	
	g. Compound proportions	**2**	
	h. Mixed proportions (Time and work only)	**2**	
	i. Variation	**2**	
	j. Percentage	**2**	
	k. Application in business and commerce	**2**	
Unit II	**Theory of sets**	**Hours**	**Mode**
	a. Elements of set Theory	**1**	Class Room Lecture/ Seminar/ Power Point Presentation / Peer Learning /Problem Solving
	b. Definition, Symbols	**1**	
	c. Roster method and Rule method	**1**	
	d. Types of sets	**2**	
	e. Union and Intersection	**1**	
	f. Sub sets	**1**	
	g. Complements	**1**	
	h. Difference of two sets	**1**	
	i. Family of Sets	**1**	
	j. Venn diagram	**3**	
	k. De-Morgon's law	**3**	
Unit III	**Mathematics for Finance**	**Hours**	**Mode**
	a. Types of Interest	**1**	Class Room Lecture/ Seminar/ Power Point Presentation / Peer Learning /Problem Solving
	b. Simple, Compound, Normal rate, Effective rate	**4**	
	c. Types of annuities	**1**	
	d. Immediate, due, deferred, continuous, perpetual and their future and present values	**4**	
	e. Discounting of bills	**1**	
	f. Face value of bills	**1**	
	g. Banker's discount	**1**	
	h. Banker's gain	**1**	
	i. Normal due date	**1**	
	j. Legal due date	**1**	
	k. Calculation of period for banker's discount and	**2**	

	true discount		