



BANKURA UNIVERSITY

(West Bengal Act XIX of 2013- Bankura University Act, 2013)

Main Campus, Bankura Block-II, P.O.: Purandarpur, Dist.: Bankura, Pin- 722155, West Bengal

Office of the Secretary, Faculty Council for Undergraduate Studies

Ref. No.: BKU/FCUG/219/2022

Date: 10/09/2022

NOTIFICATION

As directed, the undersigned is pleased to inform you that Bankura University has initiated the process to revise the existing CBCS syllabus of Undergraduate programme in Economics (Hons.) & Economics (Programme) and as an important corollary to the process, the workshop through online mode will be organized on the date mentioned herewith to get the feedback from the stakeholders. Present Students, Alumni, Guardians, Academicians and other stakeholders related to the specific programme are requested for their kind participation in the workshop and to present their views/ observations etc. The stakeholders may go through the draft syllabus attached herewith and convey their observations to the office of the undersigned on ugsecretaryoffice@bankurauniv.ac.in within seven days from the date of publication of notice.

Date: 12.09.2022

Time: 07:00 PM (IST)

Link to join: <https://meet.google.com/mwu-djnc-agb>

Sd/-
Secretary

Faculty Council for Undergraduate Studies



Draft CBCS SYLLABUS

FOR

THREE YEARS UNDER-GRADUATE COURSE

IN

.....ECONOMICS (HONOURS)

(w.e.f. 2022)



BANKURA UNIVERSITY

BANKURA

WEST BENGAL

PIN 722155



□ **General Information**

1. **Eligibility Criterion:** Only Students who have passed Mathematics at the Class XII level are eligible for admission to B.Sc. Honours Course in Economics.
2. Syllabus has been structured following the **Choice Based Credit System (CBCS)** introduced by the University Grants Commission.
3. A total no. of 26 courses/papers consisting of 14 Compulsory Core Courses, 02 Ability Enhancement Compulsory Courses (AECC), 04 Discipline Specific Elective Courses (DSE), 02 Skill Enhancement Courses (SE) and 04 Generic Elective Courses (GE) will be covered in six semesters spread over three years. GE Papers are to be chosen from courses offered by other departments.
 - A. **Core Courses (CC).** A core course is a compulsory course. A student of Economics (Hons) has to take fourteen such Economics courses over six semesters.
 - B. **Elective Courses (EC).** An elective course is a course that is to be chosen from a specified set of courses. These courses are of two types.

Discipline Specific Electives (DSE). These are elective courses that provide advanced undergraduate training in specialised areas of Economics. Semester-specific courses of this kind are offered in the fifth and sixth semesters of the Honours programme. In each of these semesters, a student has to take two such courses from the relevant semester's set of 4 courses.

Generic Electives (GE). These courses, in disciplines other than Economics, are intended to broaden the training of a student in the Economics (Hons) programme. A student of Economics will take one such course, offered by another department, in each of Semesters I to IV.
 - C. **Ability Enhancement Compulsory Course (AECC).** Two such courses are to be taken, one in Semester I (Art of Communication, equivalent to MIL) and one in Semester II (Environmental Science).
 - D. **Skill Enhancement Course (SEC).** A student is to take one such course in Semester III and one in Semester IV.
4. Each paper is of 50 marks (40 marks for End Semester Examination (ESE) and 10 marks for Internal Assessment (IA)). For practical based courses 25 marks will be for theory, 15 marks will be for practical and 10 marks for internal assessment.

Programme Outcomes

1. To train students in basic economic theory;
2. To equip students with the mathematical and statistical techniques necessary for a proper understanding of the discipline;
3. To discuss real life economic issues and problems facing the country and the world;
4. To provide students with the opportunity to focus on applied and policy issues in Economics.
5. To provide a well-resourced learning environment for Economics.

**Programme Learning Outcomes**

Students will:

1. Get an understanding of basic economic theory;
2. Learn the mathematical and statistical techniques necessary for a proper understanding of the discipline;
3. Get an introduction to real world economic issues and problems facing the country and the world;
4. Gain an understanding of proper policy responses to economic problems;
5. Get trained to collect primary data and learn sampling techniques;
6. Learn to use scientific empirical methods to arrive at conclusions about the validity of economic theories;
7. Get trained in the art of economic modelling.

☐ **Semester-Wise Sequencing of Courses**

Semester	Course Title				
I	Introductory Micro & Macro Economics (UG/ECO/101/C-1)	Mathematical Methods in Economics -I (UG/ECO/102/C-2)	Course From Other Dept. (UG/SC/103/GE-1)	Environmental Studies (UG /104/AECC-1)	----
II	Intermediate Microeconomics–I (UG/ECO/201/C-3)	Intermediate Macroeconomics–I (UG/ECO/202/C-4)	Course From Other Dept. (UG/SC/203/GE-2)	English/ MIL (UG /204/AECC-2)	-----
III	Intermediate Microeconomics–II (UG/ECO/301/C-5)	Intermediate Macroeconomics–II (UG/ECO/302/C-6)	Mathematical Methods in Economics -II (UG/ECO/303/C-7)	Course From Other Dept. (UG/SC/304/GE-3)	Data Analysis OR Research Methodology (UG/ECO/305/SEC-1)
IV	Statistical Methods For Economics -I (UG/ECO/401/C-8)	Indian Economy (UG/ECO/402/C-9)	Development Economics (UG/ECO/403/C-10)	Course From Other Dept. (UG/SC/404/GE-4)	Entrepreneurship Development OR Basic Computer Applications (UG/ECO/405/SEC-2)
V	Statistical Methods For Economics -II (UG/ECO/501/C-11)	International Economics (UG/ECO/502/C-12)	Economics of Health & Education OR Economic History of India (UG/ECO/503/DSE-1)	Issues in Indian Economy OR Money & Financial Markets (UG/ECO/504/DSE-2)	-----
VI	Introductory Econometrics (UG/ECO/601/C-13)	Public Economics (UG/ECO/602/C-14)	Political Economy OR Environmental Economics (UG/ECO/603/DSE-3)	Issues in Development Economics OR Project (UG/ECO/604/DSE-4)	-----

❖ Semester-wise Sequencing of Courses

SEMESTER –I

Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SH/ECO/ 101/C-1	Introductory Micro & Macro Economics	6	0	10	40	50	5	1	0
SH/ECO/ 102/C-2	Mathematical Methods in Economics-I	6	0	10	40	50	5	1	0
SH/ECO/103/GE-1	Anyone to be chosen from courses offered by other Disciplines **	6	-	10	40	50	5	1	-
ACSHP/104/ AECC-1	Environmental Studies	4	0	10	40	50	4	0	0
Total in Semester - I		22		40	160	200			

****Actual Distribution of Full Marks and Total No. of Hrs. allotted in this case will be according as the course chosen is practical based or is without practical**

SEMESTER –II

Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SH/ECO/ 201/C-3	Intermediate Microeconomics-I	6	0	10	40	50	5	1	0
SH/ECO/ 202/C-4	Intermediate Macroeconomics-I	6	0	10	40	50	5	1	0
SH/ECO/ 203/GE-2	Anyone to be chosen from courses offered by other Disciplines **	6	-	10	40	50	5	1	-
ACSHP/204/ AECC- 2	English/MIL	2	0	10	40	50	2	0	0
Total in Semester - II		20		40	160	200			
<i>**Actual Distribution of Full Marks and Total No. of Hrs. allotted in this case will be according as the course chosen is practical based or is without practical</i>									

**SEMESTER –III**

Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SH/ECO/ 301/C-5	Intermediate Microeconomics-II	6	0	10	40	50	5	1	0
SH/ECO/ 302/ C-6	Intermediate Macroeconomics-II	6	0	10	40	50	5	1	0
SH/ECO/303/C-7	Mathematical Methods in Economics -II	6	0	10	40	50	5	1	0
SH/ECO/ 304/GE-3	Anyone to be chosen from courses offered by other Disciplines **	6	-	10	40	50	5	1	-
SH/ECO/ 301/C-5	Any one of the following:	2				50			
	Data Analysis		15	10	25		2	0	1
	Research Methodology		0	10	40		2	0	0
Total in Semester - III		26	-	50	-	250			
<i>**Actual Distribution of Full Marks and Total No. of Hrs. allotted in this case will be according as the course chosen is practical based or is without practical</i>									

SEMESTER –IV

Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SH/ECO/401/C-8	Statistical Methods for Economics-I	6	0	10	40	50	5	1	0
SH/ECO/402/C-9	Indian Economy	6	0	10	40	50	5	1	0
SH/ECO/403/C-10	Development Economics	6	0	10	40	50	5	1	0
SH/ECO/404/GE-4	Anyone to be chosen from courses offered by other Disciplines **	6	-	10	40	50	5	1	-
SH/ECO/405/SEC-2	Any one of the following:	2				50			
	Entrepreneurship Development		0	10	40		2	0	0
	Basic Computer Applications		15	10	25		1	0	2
Total in Semester - IV		26	-	-	-	250			
<i>**Actual Distribution of Full Marks and Total No. of Hrs. allotted in this case will be according as the course chosen is practical based or is without practical</i>									

SEMESTER – V



Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SH/ECO/501/C-11	Statistical Methods for Economics-II	6	0	10	40	50	5	1	0
SH/ECO/502/C-12	International Economics	6	0	10	40	50	5	1	0
SH/ECO/503/DSE-1	Any one of the following: <ul style="list-style-type: none"> <i>Economics of Health & Education</i> <i>Economic History of India(1857 – 1947)</i> 	6	0	10	40	50	5	1	0
SH/ECO/ 504/DSE-2	Any one of the following: <ul style="list-style-type: none"> <i>Issues in Indian Economy</i> <i>Money & Financial Markets</i> 	6	0	10	40	50	5	1	0
Total in Semester – V		24	0	40	160	200			

SEMESTER – VI

Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SH/ECO/601/C-13	Introductory Econometrics	6	0	10	40	50	5	1	0
SH/ECO/602/C-14	Public Economics	6	0	10	40	50	5	1	0
SH/ECO/603/DSE-3	Any one of the following: <ul style="list-style-type: none"> <i>Political Economy</i> <i>Environmental Economics</i> 	6	0	10	40	50	5	1	0
SH/ECO/604/DSE-4	Any one of the following: <ul style="list-style-type: none"> <i>Issues in Development Economics</i> <i>Project**</i> 	6	0	10	40	50	5	1	0
Total in Semester – VI		24				200			
Grand Total (All Semesters)		142	1300						

****Evaluation of Project will be on the basis of Report (30 marks) and Viva Voce (20 marks).**



❖ Semester-wise List of Generic Elective Courses to be Offered by the Department of Economics for the Honours Students from other Disciplines

Semester-I									
Course Code	Course Title	Credit	Marks				No. of Hours		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SH/ECO/103/GE-1	<u>Any one of the following:</u> <ul style="list-style-type: none"> Introductory Microeconomics Economic History of India (1857-1947) 	6	0	10	40	50	5	1	0
Semester-II									
SH/ECO/203/GE-2	<u>Any one of the following:</u> <ul style="list-style-type: none"> Introductory Macroeconomics Money & Banking 	6	0	10	40	50	5	1	0
Semester-III									
SH/ECO/304/GE-3	<u>Any one of the following:</u> <ul style="list-style-type: none"> Indian Economy-I Public Finance 	6	0	10	40	50	5	1	0
Semester-IV									
SH/ECO/404/GE-4	<u>Any one of the following:</u> <ul style="list-style-type: none"> Indian Economy-II Environmental Economics 	6	0	10	40	50	5	1	0

SH = Science Honours, ECO= Economics, ACSHP=Arts Commerce Science Honours Pass, C= Core Course, AECC= Ability Enhancement Compulsory Course, SEC= Skill Enhancement Course, GE= Generic Elective, DSE= Discipline Specific Elective IA= Internal Assessment, ESE= End-Semester Examination, Lec.=Lecture, Tu.= Tutorial, and Pr.=Practical



Syllabus for Three Years Under-Graduate Course in Economics Honours (Programme) With Effect From Academic Session 2022-23

FIRST YEAR: SEMESTER-I

(UG/ECO/101/C-1) *Core 1: Introductory Micro & Macro Economics*

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Foreword: This course is designed to expose first-year students, who may be new to economics, the basic concepts and principles of micro & macro economic theory. The emphasis will be on thinking like an economist and the course will illustrate how micro & macro economic concepts can be applied to analyse real-life situations.

Course Outcome:

1. To explore the Subject Matter of Economics and to discuss about the Elementary Theories of Demand, Supply & Market.
2. To explain the Theory of Consumer Preferences & Choice and Theory of Firm including the concepts of Production, Cost & Revenue.
3. To explore the idea of Market Morphology including Classification and nature of different Markets.
4. To discuss about different Macroeconomic Problems & Policies.
5. To illustrate the concept of Circular Flow & National Income Accounting and theories of Money, Inflation & Unemployment.

Course Description

A. Exploring The Subject Matter of Economics

(09 Lectures)

- Nature & Significance of Economics - Economics as a Social Science
- Definition of Economics – Problem of Scarcity & Optimal Choice – Scarcity, Choice and Opportunity Cost
 - Production Possibility Frontier – Trade-Offs & Efficiency - The Cost Benefit Approach to Decisions –
 - Rationality and Self Interest – The Concept of Margin & Marginal Analysis
- Methodology of Economics: Theories & Models – Role of Assumptions - Positive & Normative Economics
 - Microeconomics and Macroeconomics: Distinction & Interdependence
- Three Fundamental Economic Questions: What to Produce and in What Quantities – How to Produce – For Whom to Produce – Various Forms of Economic Systems – The Role of the Government.
- Some Basic Concepts: Commodity, Consumer, Firm, Industry, Market – Value & Price - Free Goods & Economic Goods - Consumption Goods & Capital Goods – Public Goods & Private Goods - Endogenous &
 - Exogenous Variables – Stocks & Flows – Real & Nominal Variables – Equation & Identity - Ex-Ante & Ex-Post Values.
- Reading Graphs: Functional Relations – Graphs, Slopes & Intercepts – Average & Marginal Values.
 - (Note: Brief Discussion of the Concepts)

B. Elementary Theories of Demand, Supply & Market

(11 Lectures)

- Demand Analysis: Definition of Demand – Individual & Market Demand - Determinants of Demand – Demand Schedule - Law of Demand, Demand Function and The Demand Curve - Derivation of the Market Demand Curve from Individual Demand Curves – Shifts of Demand Curves Versus Movements along a Demand Curve
- Elasticities of Demand: Price Elasticity of Demand – Definition, Calculation, Determinants and Uses – Cross Price Elasticity & Income Elasticity of Demand – Definition, Calculation and Uses – Concepts of Normal & Inferior Goods and Substitutes & Complements
- Supply Analysis: Definition of Supply – Determinants of Supply – Law of Supply, Supply Function and the Supply Curve – Shifts of Supply Versus Movements along Supply Curve – Market Supply – Elasticity of Supply: Definition & Uses.
- Market Equilibrium: Interaction between Market Demand & Market Supply and Determination of Equilibrium Price & Quantity - The Concept of Stability of Equilibrium (Walrasian Version).



- Comparative Static Analysis: Consequences of Shifts in Demand & Supply.
- Applications of Demand & Supply Analysis: Price Rationing, Price Floors, Consumer's Surplus, Producer's Surplus
(Note: Brief Discussion & Simple Graphical Analysis)

C. Theory of Consumer Preferences & Choice

(06 Lectures)

- Marshallian Approach – Concept & Cardinal Measurement of Utility – Total & Marginal Utility - Law of Diminishing Marginal Utility – Consumer's Equilibrium: Law of Equi-Marginal Utility – Diminishing Marginal Utility and The Law of Demand.
- Indifference Curve Approach: Concept of Ordinal Utility and Assumptions of Indifference Curve Approach Definition & Properties of Indifference Curves – The Budget Line & its Intercept and Slope - Consumer's Equilibrium - The Concept of Tangency Solution
- Comparative Statics: Price Effect, Income Effect and Substitution Effect - Price-Consumption, Income-Consumption & Engel Curves – Classification of Commodities: Normal, Inferior and Giffen Goods
(Note: Brief Discussions & Simple Graphical Analysis)

D. Theory of Firm: Production, Cost & Revenue

(10 Lectures)

- Production: Input-Output Relationships & The Production Function – Law of Variable Proportions – Total, Average & Marginal Product Curves – Short Run & Long Run Production – Return to Factor & Returns to Scale – Choice of Technology: Isoquants & their Properties – Iso-Cost lines – Simple Derivation of the
- Equilibrium - Cost Minimising & Output Maximising Input Combination – Expansion Path.
- Cost: Fixed Cost, Variable Cost & Sunk Costs – Cost Function - Total, Average and Marginal Cost Curves
- Revenue: Concepts of Total Revenue (TR), Average Revenue (AR) & Marginal Revenue (MR)
- MC, MR & Equilibrium of the Firm – Profit Maximisation.
(Note: Brief Discussion & Simple Graphical Analysis)

E. Market Morphology

(03 Lectures)

- Classification of Markets - Different Criteria for Classification of Markets: Nature of Product, Number of Buyers & Sellers, Control Over Price, Conditions of Entry & Exit - Perfect Competition, Monopoly, Bilateral Monopoly, Monopsony, Monopolistic Competition, Duopoly and Oligopoly (*Definitions, Examples & Discussion of Basic Features Only*).

F. Macroeconomic Problems & Policies

(03 Lectures)

- Major Macroeconomic Issues
- Macroeconomic Policies - Goals, Targets & Instruments
- Basic Ideas of Classical & Keynesian Macroeconomics

G. Circular Flow & National Income Accounting

(10 Lectures)

- Circular Flow of Income: Circular Flow of Income in a Closed Economy Without Government Activities & With Government Activities - Circular Flow of Income in an Open Economy – Withdrawal & Injections.
- Definitions, Concepts & Measurement of National Income: GDP, GNP, NDP, NNP At Market Price & Factor Cost - Concepts of Disposable Income, Personal Income, Per-capita Income.
- Three Methods of National Income Accounting – Output, Income and Expenditure Methods – Concepts Final Products, Intermediate Products & Value-Added
- Real & Nominal GDP ---the Concept of GDP Deflator and Price Indices
- The Accounting Identity Between Saving & Investment
- Problems of Using National and Per-capita Income as a Measure of Economic Welfare.

H. Money, Inflation & Unemployment

(08 Lectures)

- Definition & Functions of Money
- Components of Money Supply – Determinants of Money Supply
- Inflation: Types, Causes (Demand & Cost or Supply Side Factors), Measures (WPI Vs. CPI), Economic Effects & Control (Anti-Inflationary Policies) of Inflation



- Types & Characteristics of Unemployment – Concept of Natural Rate of Unemployment(or NAIRU)
- Short-Run Trade-Off Between Inflation & Unemployment – Policy Implication
- (Note: Brief Discussions of Basic Ideas Only)

REFERENCES

1. Samuelson & Nordhaus: *Economics* (Mc-GrawHill)
2. Soumyen Sikdar: *Principles of Macroeconomics* (Oxford University Press)
3. N. Gregory Mankiw: *Economics- Principles & Applications* (Cengage Learning India Pvt. Ltd., 2007)
4. Karl E. Case & Ray C. Fair: *Principles of Economics* (Pearson Education, 8th Edn.2007)
5. Joseph E, Stiglitz & Carl E. Walsh: *Economics* (W. W. Norton & Company, 2007)
6. Lipsey & Chrystal: *Economics* (Oxford University Press)
7. Robert S. Pindyck, Daniel L. Rubinfeld, Prem L.Mehta: *Microeconomics* (7th Edn. Pearson).
8. Ahuja H.L. *Principles of Micro Economics*, S. Chand Limited, Delhi

Sample questions

1. Objective type questions (of 2 marks)

- a) Define substitute and complementary goods.
- b) State the law of demand. Mention one exception to this law.
- c) What do you mean by marginal utility?
- d) Draw a demand curve when price elasticity of demand is zero. What does this demand curve indicate?
- e) Mention two main features of a perfectly competitive market.
- f) Make a distinction between voluntary unemployment and involuntary unemployment.
- g) What is natural rate of unemployment?
- h) Define expansion path and write down its equation.

2. Short answer type questions (of 5 marks)

- a) What is an indifference curve? State and discuss the characteristics of an indifference curve.
- b) Write the assumptions of Marshallian demand theory. How would you derive the demand curve under this approach?
- c) Define Average revenue and marginal revenue. Establish the relation between average revenue, marginal revenue and price elasticity of demand.
- d) What is money? Explain various functions of money.
- e) Define inflation. Discuss briefly the economic effects of inflation.
- f) Define price elasticity of demand. Show how the price elasticity of demand can be measured at any particular point on a straight line demand curve.

3. Long answer type questions (of 10 marks)

- a) Show the equilibrium of a consumer with the help of indifference curve and budget line. What will happen to the equilibrium position if the indifference curve is a straight line?
- b) Discuss the final product method and value-added method of measurement of national income. Is national income a true index of social welfare?

**FIRST YEAR: SEMESTER-I*****Core 2: Mathematical Methods in Economics-I*****(UG/ECO/102/C-2)****Credit- 06****Foreword****Full Marks: 50****Classes: 60 (Lecture) + 15 (Tutorial)**

Economics is increasingly becoming quantitative in nature. The students are to develop skills in mathematical techniques that are required for a meaningful study of both Theoretical and Applied Economics. These courses in Mathematical Methods in Economics I & II are supposed to cover the essential topics in Mathematics needed for Economic analysis. The primary purpose, however, is to understand Economics, for which Mathematics serves only as a useful tool. So emphasis should be given not on rigorous development of the mathematical concepts but on how these concepts are and could be applied for a more logical presentation of Economics.

Course outcome

- To provide the knowledge of Sets & Set Operations and its applications in Consumer Preferences and Budget in Terms of Sets
- To teach some Preliminary Mathematical Concepts and its applications in Calculations of Population Growth, Compound Interest, Depreciation & Present Value
- To teach Matrix Algebra and its applications in Partial Market Equilibrium Model - Simple National Income Determination Model & Comparative Static Analysis.
- To provide the knowledge of Functions & Derivatives and its applications in the Utility Function, Demand & Supply Functions, Production & Cost Functions, Revenue Function, Consumption Function etc.
- To teach Optimization Techniques and Techniques of Integration and their applications in Utility Maximization, Cost Minimization, finding Total Functions, Consumer's Surplus, Producer's Surplus etc.

Course Description:**A. Sets & Set Operations****(03 Lectures)**

- Set Notations - Universal set – Subsets - Null Set - Finite & Infinite Sets - Convex Sets - Basic Set Operations.
- Application in Economics: Consumer Preferences and Budget in Terms of Sets.

B. Some Preliminary Mathematical Concepts**(07 Lectures)**

- Concepts of Arithmetic, Geometric and Harmonic Progression- Formulae of Sum of AP and GP Series- Permutations and Combinations - The Binomial Theorem – Logarithms - Common Logarithms, Natural Logarithms and the Number e - Basic Log Operations.
- Applications: Calculations of Population Growth, Compound Interest, Depreciation & Present Value

C. Matrix Algebra**(08 Lectures)**

- Concepts of Scalar, Vector & Matrices - Systems of Equations and their Representation through Vectors and Matrices – Order & Rank of a Matrix
- Some Specific Matrices: Diagonal, Triangular, Identity, Null, Symmetric, Idempotent
- Elementary Matrix Operations: Addition, Subtraction & Multiplication of Matrices
- Determinants - Minor & Cofactor - Transpose & Inverse of Matrices
- Techniques of Solving Systems of Linear Equations: Matrix Method & by Cramer's Rule.
- Jacobian Determinant & Existence of Solutions.



- Applications: Partial Market Equilibrium Model - Simple National Income Determination Model & Comparative Static Analysis.

D. Functions & Derivatives

(16 Lectures)

- Functions of One Variable: Different Types of Functions & Their Graphs: Linear, Quadratic, Cubic, Exponential & Logarithmic Functions.
- First & Second Order Derivatives: Slope & Curvature - Increasing, Decreasing & Constant Functions - Convex, Concave & Linear Functions
- Functions of Several Variables: Continuous & Differentiable Functions – Total & Partial Derivatives - Homogeneous & Homothetic Functions – Euler's Theorem - Implicit Function Theorem.
- Application in Economics: The Utility Function - Demand & Supply Functions - Production & Cost Functions - Revenue Function – Consumption Function – Saving Function - Marginal Utility - Marginal
- Product - Marginal Cost - Marginal Revenue – Marginal Propensity to Consume – Marginal Propensity to Save - Elasticity of Demand - Relation between Average Revenue, Marginal Revenue & Elasticity - Slope and Curvature of Indifference Curves and Isoquants - Elasticity of Factor Substitution - Returns to Scale - Properties of Cobb-Douglas - Product Exhaustion Theorem- Market Equilibrium - Equilibrium in National Income Analysis – Comparative Static Analysis in One-Commodity Market Model & National Income Model.

E. Optimisation Techniques

(16 Lectures)

- Concepts of Maxima & Minima (Local & Global)
- Unconstrained Maximisation & Minimisation: Derivation of First Order & Second Order Conditions – Second Order Condition with Hessian Determinant.
- Application in Economics: Relation between Average & Marginal Products – Relation between Average & Marginal Costs - Profit Maximisation in Different Markets.
- Constrained Maximisation & Minimisation: Lagrange Multiplier Method - Derivation of First Order & Second Order Conditions - Second Order Condition with Bordered Hessian Determinant.
- Application in Economics: Utility Maximisation Subject to Budget Constraint – Output Maximisation Subject to Cost Constraint - Cost Minimisation Subject to Output Constraint

F. Techniques of Integration

(10 Lectures)

- Indefinite & Definite integrals
- Application in Economics: Finding Total Functions When Marginal Functions are Given- Consumer's Surplus- Producer's Surplus

REFERENCES

1. Knut Sydsaeter & Peter J. Hammond: *Mathematics for Economic Analysis* ((Pearson Educational Asia, Delhi, 2002)
2. Alpha C. Chiang & Kevin Wainwright: *Fundamental Methods of Mathematical Economics* (McGraw Hill International, 2005)
3. Lawrence Blume & Carl P. Simon: *Mathematics for Economists* (Viva Norton Student Edition, 2010; Viva Books Pvt. Ltd)
4. Henderson and Quandt: *Microeconomic Theory: A Mathematical Approach* (McGraw-Hill)
5. E.T. Dowling: *Introduction to Mathematical Economics, Schaum's Outline Series* (McGraw- Hill)
6. Taro Yamane: *Mathematics for Economics*
7. M.D. Intriligator: *Mathematical Optimization and Economic Theory* (Prentice Hall)
8. Mehta and Madnani, *Mathematics for Economists*, S.Chand and Sons, New Delhi.

**Sample questions****1. Objective type questions (of 2 marks)**

- If the equation of a straight line be $4x + 3y = 1$, find its slope.
- If the numbers in a series are in AP and the first terms is 4 and common difference is 4, find the 10th term.
- In a market the demand and supply functions are given as follows :
 $D = 30 - 40P$
 $S = 21 + 5P$
 Find out the equilibrium price (P)
- If $y = a/x$, find the value of elasticity of y with respect to x.
- If a consumption function is represented by $C = 1500 + .75Y$, where C and Y represent aggregate consumption and aggregate income respectively, find the saving function. What are the values of MPC and MPS?
- State the first and second order conditions of consumer's equilibrium mathematically (mentioning symbols used).
- Write down a homogeneous function of degree 'K'
- Write down the lagrangian expression for cost minimisation subject to output constraint mentioning symbols used.

2. Short answer type questions (of 5 marks)

- Let the simple national income model be,
 $Y = C + I$
 $C = C_0 + bY$ and,
 $I = I_0$,
 Where, Y, C and I denote national income, aggregate consumption and aggregate investment respectively.
 - Identify the endogenous variables.
 - Find out the equilibrium level of income if $C_0 = 85$, $b = 0.9$ and $I_0 = 55$.
 - What will be the change in income (when $b = 0.9$) if I_0 changes?
- What is the relationship between degree of homogeneity and returns to scale? Find the degree of homogeneity and returns to scale of the following production functions :
 - $Q = 8K + 9L$,
 - $Q = K^2 + KL + L^2$, when Q, K and L represent quantities of output, capital and labour respectively.
- State and prove the product exhaustion theorem.
- Given $AR = 60 - 3a$, find TR and MR functions.
- Define AC and MC. Derive the relation between AC and MC.
- If the marginal revenue function is given by $MR = 84 - 4Q - Q^2$, where MR and Q represent marginal revenue and quantity of output sold, find out the total revenue function. [given that, total revenue $TR = 0$, When $Q = 0$].

3. Long answer type questions (of 10 marks)

- Write down the Cobb-Douglas production function. State and prove different properties of Cobb-Douglas production function.
- Given the consumption utility function, $u = x_2y_2$ and $P_x = 4$, $P_y = 8$, $B = 96$



Where 'u' denotes utility derived from consumption of two commodities x and y, P_x and P_y are prices of x and y, 'B' denotes the consumer's total budget,

- i) Write down the Lagrangian function for utility maximisation.
- ii) Find the optimal level of purchase x and y.
- iii) Check the sufficient condition with the help of Bordered Hessian determinant.

**FIRST YEAR: SEMESTER-I****(UG/SC/103/GE-1) GE-1: Course to be Chosen from Other Discipline**Credit- 06Full Marks: 50**Classes: Available in syllabus of respective discipline**

FIRST YEAR: SEMESTER-I**(UG/104/AECC-1) AECC-1: Environmental Studies**Credit- 04Full Marks: 50**Classes: Available in syllabus for Environmental Studies**

FIRST YEAR: SEMESTER-II**(UG/ECO/201/C-3) Core 3: Intermediate Microeconomics-I**Credit- 06Full Marks: 50Classes: 60 (Lecture) + 15 (Tutorial)**Course outcome**

- To illustrate the Theory of Consumer Behaviour along with Alternative Approaches like Cardinal Utility Approach, Ordinal Utility Approach, The Revealed Preference Approach.
- To explore the Relation between Price Elasticity of Demand, Price and Marginal Revenue, Relation between Price Elasticity and Total Expenditure.
- To explain the Theory of Production and Cost.
- To explain the Theory of Perfect Competition.

Course Description:**A. Theory of Consumer Behaviour- Alternative Approaches****(25 Lectures)**

- **Cardinal Utility Approach:** Assumptions – Utility Function – Total & Marginal Utility - Law of Diminishing Marginal Utility – Consumer's Equilibrium – Law of Equi-Marginal Utility - Derivation of the Marshallian Demand Curve – Limitations of the Cardinal Approach.
- **Ordinal Utility Approach:** Preference & Indifference - General Axioms of Choice – Lexicographical Ordering - Derivation of Indifference Curve from the Axioms - Indifference Curve and its Properties – The Diminishing Marginal Rate of Substitution - Budget Constraint & The Budget Line - Consumer's Equilibrium - Pathological Cases – Price-Consumption, Income-Consumption and Engel's Curves - Price Effect, Income Effect and Substitution Effect (Hicks & Slutsky Measures) – Shape of Price-Consumption Curve in case of Normal, Inferior and Giffen Goods - Derivation of Demand Curve from Price- Consumption Curve – Compensated & Uncompensated Demand Curves – The Slutsky Equation – Consumer's Surplus Under Indifference Curve Approach - Limitations of the Indifference Curve Approach.
- **The Revealed Preference Approach:** Strong and Weak Axioms of Revealed Preferences - Derivation of Demand Curve – Evaluation of Revealed Preference Approach
- Choice Under Uncertainty - Utility Function and Expected Utility - Risk Aversion and Risk Preference (*Concepts Only*)
- Relation between Price Elasticity of Demand, Price and Marginal Revenue – Relation between Price Elasticity and Total Expenditure.

**B. Theory of Production and Cost****(20 Lectures)**

- Production: General Concept of Production Function – Relation between Total Product, Average Product and Marginal Product – Law of Variable Proportions – The Fixed Proportion Production Function – Isoquants & their Properties - Marginal Rate of Technical Substitution - Economic Region of Production –Elasticity of Substitution - Return to Factor & Returns to Scale - Homogeneous and Homothetic Production Functions - The Cobb Douglas and CES Production Functions.
- Optimising Behaviour of The Firm: Iso-Cost Line - Constrained Output Maximization and Constrained Cost Minimization - Expansion Path.
- Cost: Different Concepts of Costs – Economic / Opportunity Cost and Accounting Cost - Concept of Sunk Cost - Cost Function – Relation between the Expansion Path and Cost Function – Time dimension of costs: Short Run Cost Analysis– Total, Fixed and Variable Costs – Derivation of Short Run Total, Average and
- Marginal Cost Curves – Long Run Cost Analysis: Long Run Total and Average Cost Curves as Envelope of Short Run Cost Curves – Derivation of Long Run Marginal Cost Curve from Short Run Marginal Cost Curves.

C. Theory of Perfect Competition**(15 Lectures)**

- Perfect Competition and Pure Competition—Short Run and Long Run Equilibrium of a Competitive Firm – Short Run and Long Run Supply Curves — Long Run Equilibrium of the Competitive Industry – Price Determination in a Competitive Industry – Existence, Uniqueness and Static Stability of Equilibrium – Long Run Supply Curves of the Industry - Effects of External Economies and Diseconomies – Effect of Change in Cost – Effect of Imposition of Tax – Deadweight Loss of a Tax - Effect of Price Control.

REFERENCES

1. Robert S. Pindyck, Daniel L. Rubinfeld, Prem L.Mehta: *Microeconomics* (7th Edn. Pearson.)
2. Samuelson and Nordhaus : *Economics*
3. Koutsoyiannis: *Microeconomic Theory*
4. Ferguson and Gould: *Microeconomic Theory*
5. H. Varian: *Intermediate microeconomics*, 7th edn. (East-West Press)
6. Henderson and Quandt: *Microeconomic Theory*
7. Anindya Sen: *Microeconomics- Theory and Applications* (Oxford University Press)
8. Hugh Gravelle & Ray Rees: *Microeconomics* (Pearson)
9. Jaydeb Sarkhel: *Microeconomic Theory* (Book Syndicate, 2013)

Sample questions**1. Objective type questions (of 2 marks)**

- a) Who developed the Revealed preference theory?
- b) Define Substitute and Complementary goods.
- c) Derive the relationship among AR,MR and price elasticity of demand.
- d) If MU_x/MU_y is constant, what will be the shape of indifference curve?
- e) What is expansion path? Write down the equation of expansion path.
- f) Show that if AC rises, then $MC > AC$.
- g) What do you mean by Law of variable proportion?
- h) What is product exhaustion theorem.
- i) What are the characteristics of perfect competition market?
- j) Distinguish between cost function and cost equation.
- k) What is Income Consumption Curve? Why ICC always start from the origin?
- l) What is homogeneous production function?

2. Short answer type questions (of 5 marks)

- a. Write down the Cobb-douglas production function. Discuss any two properties of Cobb-Doglas production function.
- b. Mathematically derive the relationship between AC and MC. Show the relationship in a graph.

**3. Long answer type questions (of 10 marks)**

- Distinguish between cost function and cost-equation. Show that LAC is the envelope of SACs. Using this tool show that LMC is not the envelope of SMCs.
- What do you mean by indifference curve? Show that Price effect of price change is the algebraic summation of substitution effect of price change and income effect of price change in terms of Slutsky equation.

FIRST YEAR: SEMESTER-II**(UG/ECO/202/C-4)****Core 4: Intermediate Macroeconomics-I**Credit- 06Full Marks: 50Classes: 60 (Lecture) + 15 (Tutorial)**Course outcome**

- To explain the features of Simple Keynesian System.
- Introducing the Money Market.
- To generalize Interaction between Commodity Market & Money Market through the IS-LM Model.
- To explain the features of Complete Keynesian System

Course Description:**A. Simple Keynesian System****(14 Lectures)**

- Keynesian Consumption Function & its Properties – Factors Affecting Consumption Expenditure --- Saving Function & its Properties
- Determination of Equilibrium Level of National Income – Nature of Equilibrium – Stability of Equilibrium
- Comparative Static Analysis: The Multiplier Analysis With and Without Governmental Sector – Investment Multiplier, Government Expenditure Multiplier, Balanced Budget Multiplier - Limitations of the Multiplier
- Analysis - The Paradox of Thrift.

B. Introduction of the Money Market**(12 Lectures)**

- Demand for Money: Three Motives of Holding Money --- Transactions, Precautionary & Speculative Motives
- Keynesian Liquidity Preference Theory – Indeterminacy of Rate of Interest in the Liquidity Preference Theory – The Liquidity Trap
- The Inventory Theoretic Approach to Transactions Demand for Money
- Supply of Money: Components of Money Supply - Credit Creation by Commercial Banks – High-Powered Money or Monetary Base & Money Multiplier.

C. The IS-LM Model (Interaction between Commodity Market & Money Market)**(14 Lectures)**

- Commodity Market Equilibrium and Construction of the IS Curve – Slope and Shifts of IS Curve - Money Market Equilibrium and Derivation of the LM Curve – its Slope and Shifts - Determination of Equilibrium Level of Income and Rate of Interest in Terms of the IS-LM Model – Stability of Equilibrium
- Comparative Static Analysis: Effects of Shifts in Saving, Investment, Government expenditure, Taxation, Money Demand & Money Supply Schedules
- Relative Effectiveness of Monetary & Fiscal Policies in terms of IS-LM model.

D. The Complete Keynesian System**(20 Lectures)**

- Basic Concepts of Aggregate Demand (AD) and Aggregate Supply (AS): Construction of the AD Curve from the IS-LM Model – Economic Analysis of its Slope and Shifts - Introduction of the Labour Market and Derivation of the Aggregate Supply Curve – its Slope and Shifts – the Short Run and Long Run AS Curves.
- Interaction between Commodity Market, Money Market and Labour Market - Determination of equilibrium in terms of the AD-AS Model – Stability of equilibrium and comparative statics especially effects of monetary and fiscal policies.



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- Underemployment and its Causes – Possible Solutions – Price Flexibility – Real Balance Effect and Full Employment.

REFERENCES

1. Dornbusch, Fischer and Startz: *Macroeconomics* (McGraw Hill, 11th edition, 2010).
2. N. Gregory Mankiw: *Macroeconomics* (Worth Publishers, 7th edition, 2010).
3. Olivier Blanchard: *Macroeconomics* (Pearson Education, Inc., 5th edition, 2009).
4. Richard T. Froyen: *Macroeconomics* (Pearson Education Asia, 2nd edition, 2005).
5. Andrew B. Abel and Ben S. Bernanke: *Macroeconomics* (Pearson Education, Inc., 7th edition, 2011).
6. Errol D'Souza: *Macroeconomics* (Pearson Education, 2009).
7. Hall & Taylor: *Macroeconomics* (W. W. Norton & Company 5th edn. 1997)
8. Soumyen Sikdar: *Principles of Macroeconomics* (Oxford University Press)
9. William Branson: *Macroeconomic Theory & Policy* (East West Press, 3rd edn. 2014)

Sample questions

1. Objective type questions (of 2 marks)

- a) What is consumption function and MPC?
- b) What are the properties of Keynesian consumption function?
- c) Show that $APC + APS = 1$ and $MPC + MPS = 1$.
- d) Mention the objective factors affecting consumption expenditure.
- e) What is multiplier and what is the value of static multiplier?
- f) What is balanced budget multiplier?
- g) What are the motives of holding money?
- h) What is speculative demand for money?
- i) What is LM curve and its slope ?
- j) Define IS curve and its slope ?

2. Short answer type questions (of 5 marks)

- a. State and explain the properties of Keynesian consumption function.
- b. Explain the concept of Paradox of thrift with the help of suitable diagram.
- c. Using IS-LM framework analyse the affects of an increase in money supply on the equilibrium values of level of income and rate of interest in a closed economy.

3. Long answer type questions (of 5 marks)

- a. Explain with suitable diagram how the equilibrium level of income is determined in the Keynesian Model. State the stability condition of equilibrium in this model.
- b. What is real balance effect? Analyse how price flexibility can bring about full employment through the real balance effect.

**FIRST YEAR: SEMESTER-II*****GE-2: One Course to be Chosen from Other Discipline*****(UG/SC/203/GE-2)**Credit- 06Full Marks: 50Classes: Available in syllabus of respective discipline**FIRST YEAR: SEMESTER-II****(UG/204/AECC-2)*****AECC-2: English/ MIL***Credit- 02Full Marks: 50Classes: Available in MIL syllabus**SECOND YEAR: SEMESTER-III****(UG/ECO/301/ C-5)*****Core 5: Intermediate Microeconomics-II***Credit- 06Full Marks: 50Classes: 60 (Lecture) + 15 (Tutorial)**Course outcome**

- To explore the knowledge of the Theory of Imperfect Competition.
- To explore the knowledge of the Theory of Oligopoly.
- To explore the knowledge of the Theory of Factor Pricing
- To provide the knowledge about General Equilibrium and Welfare Economics.

Course Description:**A. Theory of Imperfect Competition****(18 Lectures)**

- Monopoly: Sources & Major Features of Monopoly - AR and MR Curves Under Monopoly – Relation between AR, MR and Elasticity of Demand – Short Run & Long Run Equilibrium under Monopoly – Absence of Supply Curve under Monopoly - Price Discrimination – First, Second & Third Degree –Equilibrium under Price Discrimination – Multiple Plant Monopolist – Equilibrium under Bilateral Monopoly - Concept & Measures of Monopoly Power – Natural Monopoly
- Monopolistic Competition: Assumptions – Product Differentiation & Demand curve – Concept of Industry and Group - Short Run and Long Run Equilibrium – Excess Capacity and Selling Cost.

B. Theory of Oligopoly**(10 Lectures)**

- Characteristics of Oligopoly - Non-Collusive Oligopoly Models: Cournot's Model of Duopoly - Stackelberg's Model & Price Leadership – Collusive Oligopoly – Collusion, Formation of Cartel and Market Sharing – Price Rigidity under Oligopoly: Kinked Demand Curve Model.

E. Theory of Factor Pricing**(20 Lectures)**

- Demand for Factors of Production – Determinants of Price Elasticity of Demand for a Factor – Marginal Productivity Theory and its Limitations
- Theory of Wage: Choice between Work and Leisure – Derivation of Individual Labour Supply Curve – Total Labour Supply Curve – Demand for Labour – Determination of Equilibrium in a Competitive Labour Market - Collective Bargaining and Wage Rate.
- Theory of Rent: Ricardian Theory of Rent - Transfer Earning and Economic Rent – Quasi Rent – Rent and Price



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- Theory of Profit: Gross and Net Profit- Elements of Profit - Risk and Uncertainty Theory - Innovation Theory of Profit – Theory of Monopoly Power.

F. General Equilibrium and Welfare Economics

(12 Lectures)

- Partial and General Equilibrium – A Formal Statement of General Equilibrium Approach
- The Concept of Pareto Optimum – Pareto Optimality in Consumption – Pareto Optimality in Production – General Pareto Optimality Condition – Concepts of Externalities & Market Failure.

REFERENCES

1. Robert S. Pindyck, Daniel L. Rubinfeld, Prem L.Mehta: *Microeconomics* (7th Edn. Pearson.)
2. Samuelson and Nordhaus : *Economics*
3. Koutsoyiannis: *Microeconomic Theory*
4. Ferguson and Gould: *Microeconomic Theory*
5. H. Varian: *Intermediate microeconomics*, 7th edn. (East-West Press)
6. Henderson and Quandt: *Microeconomic Theory*
7. Anindya Sen: *Microeconomics- Theory and Applications* (Oxford University Press)
8. Hugh Gravelle & Ray Rees: *Microeconomics* (Pearson)
9. Jaydeb Sarkhel: *Microeconomic Theory* (Book Syndicate, 2013)

Sample questions

1. Objective type questions (of 2 marks)

- a. What is meant by first degree price discrimination?
- b. What is quasi rent?
- c. Distinguish between gross profit and net profit
- d. State two features of monopolistic competition market.
- e. State two features of oligopoly market.

2. Short answer type questions (of 5 marks)

- a. Distinguish between perfectly competitive and monopoly markets.
- b. Explain the relationship between AR, MR and elasticity of demand
- c. Distinguish between partial and general equilibrium.
- d. Explain briefly Ricardian theory of rent.

3. Long answer type questions (of 10 marks)

- a. Explain the characteristics of equilibrium under monopoly. How is price determined under monopoly?
- b. Define trade union. What are its functions? Can trade union raise wages?

SECOND YEAR: SEMESTER-III

(UG/ECO/302/ C-6)

Core 6: Intermediate Macroeconomics-II

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Course outcome

- To explore the Classical View of Macroeconomics in Respect of the Determination of Employment, Output and Prices and its comparison with the Keynesian system.
- To explain the Theories of Consumption.
- To explain the Keynesian Analysis of the Investment Function along with its Shortcomings, concepts of MEC & MEI.
- To discuss about the Quantity Theory Approach to Inflation.



- To illustrate the Harrod and Domar's Model of Economic Growth and Solow One Sector Model of Economic Growth.

Course Description:**A. The Classical System****(15 Lectures)**

- The Classical View of Macroeconomics in Respect of the Determination of Employment, Output and Prices
- Wage-Price Flexibility and Full Employment
- The Classical Quantity Theory of Money and its Criticism- Friedman's Restatement of Quantity Theory
- Say's Law and Walras' law - The Dichotomy between the Real and Monetary Sectors -Neutrality of Money.
- Comparison between Keynesian & Classical Systems.

B. Theories of Consumption**(10 Lectures)**

- Empirical Findings Regarding Consumption Function – Kuznets' Findings and The Consumption Puzzle - Alternative Theories of Consumption – Fisher's Theory of Optimal Intertemporal Choice - Absolute income Hypothesis, Relative Income Hypothesis, Permanent Income Hypothesis & Life Cycle Hypothesis.

C. The Investment Function**(10 Lectures)**

- The Keynesian Analysis of Investment – MEC and MEI - Shortcomings of Keynesian Analysis.
- Net Present Value criterion and Marginal Efficiency Criterion of Investment
- The Fixed Acceleration Principle of Investment – its Implications and Limitations.
- The Flexible Acceleration Principle of Investment – its Implications and Limitations.

D. Theories of Inflation**(15 Lectures)**

- The Quantity Theory Approach to Inflation
- Demand Pull Inflation - Inflationary Gap Analysis and its Shortcomings
- Concepts of Cost Push & Mark Up Inflation
- Distinction between Demand Pull & Cost Push Inflation
- The Philips Curve and the Trade-off between Inflation and Unemployment – Short Run and Long Run Philips Curve.

E. Economic Growth**(10 Lectures)**

- Harrod and Domar's Model of Economic Growth – Assumptions – Implications – Actual, Warranted and Natural Rates of Growth – The Knife Edge Problem
- Solow One Sector Model of Economic Growth (without technological change)

REFERENCES

1. Dornbusch, Fischer and Startz: *Macroeconomics* (McGraw Hill, 11th edition, 2010).
2. N. Gregory Mankiw: *Macroeconomics* (Worth Publishers, 7th edition, 2010).
3. Olivier Blanchard: *Macroeconomics* (Pearson Education, Inc., 5th edition, 2009).
4. Richard T. Froyen: *Macroeconomics* (Pearson Education Asia, 2nd edition, 2005).
5. Andrew B. Abel and Ben S. Bernanke: *Macroeconomics* (Pearson Education, Inc., 7th edition, 2011).
6. Errol D'Souza: *Macroeconomics* (Pearson Education, 2009).
7. Hall & Taylor: *Macroeconomics* (W. W. Norton & Company 5th edn. 1997)
8. Soumyen Sikdar: *Principles of Macroeconomics* (Oxford University Press)
9. W. H. Branson: *Macroeconomics* (Harper & Row, 3rd edn. 1989)
10. **Mankiw, N. (2016). *Macroeconomics*, 9th ed. Worth Publishers**

**Sample questions****1. Objective type questions (of 2 marks)**

- State Say's Law of Markets and its major implication.
- What do you mean by Neutrality of Money?
- What do you mean by Money Illusion?
- What is meant by Wage-price Flexibility?
- Distinguish between Autonomous Investment and Induced Investment.
- How is Net Present Value of a capital asset calculated?
- What do you mean by Stagflation?
- What are the properties of Warranted Rate of Growth?

2. Short answer type questions (of 5 marks)

- Explain why and how price level is determined solely from the monetary sector in the Classical Model?
- Discuss briefly the Keynesian Theory of Investment.
- What is Quantity Theory of Money? Discuss Fisher's version of the Quantity Theory of Money?
- Briefly explain Friedman's Restatement of the Quantity Theory of money.
- What is Inflationary Gap? Explain the concept of Inflationary Gap with a suitable diagram.
- Distinguish between Demand Pull and Cost Push Inflation and comment on whether this distinction can be made in practice.

3. Long answer type questions (of 10 marks)

- Discuss the Relative Income Hypothesis relating to consumption function.
- Briefly describe the Simple Acceleration Principle of investment and state its major implications and limitations

SECOND YEAR: SEMESTER-III**(UG/ECO/303/ C-7) Core 7: Mathematical Methods in Economics-II**Credit- 06Full Marks: 50Classes: 60 (Lecture) + 15 (Tutorial)**Course outcome**

- To teach Difference Equations and its applications in Cobweb Model - Samuelson's Multiplier-Accelerator Interaction Model.
- To teach Differential Equations and its applications in Excess Demand Functions & Price Dynamics in a Single Market.
- To explain the Linear Programming.
- To explore the concepts and features of Input-Output Analysis.
- To explore Basic Game Theory and its applications in Theory of Oligopoly and to conceptualize the Decisions Under uncertainty

Course Description:**A. Difference Equations****(8 Lectures)**

- Finite Difference; Equations of First & Second Order and their Solutions.
- Applications in Economics: Cobweb Model - Samuelson's Multiplier-Accelerator Interaction Model.

B. Differential Equations**(8 Lectures)**

- Differential Equations of First & Second Orders and their Solutions



- Application in Economics: Excess Demand Functions & Price Dynamics in a Single Market.

C. Linear Programming (15 Lectures)

- Optimisation Problem - Linear Programming Technique as a Tool for Optimisation - General Formulation of the Linear Programming Problem - Objective Function, Structural Constraints, Non-Negativity Restrictions – Feasible Region – Optimum Solution — Application in Economics.
- Graphical Solutions of Some Standard Maximisation & Minimisation Problems
- Concepts of Slack Variable, Feasible Solutions, Basic Solutions & Basic Feasible Solution
- The Dual Problem – Economic Interpretation of Duality.

D. Input-Output Analysis (8 Lectures)

- Basic Concept of Input-Output Analysis
- Assumptions & Structure of the Leontief Static Open Model (2 x 2 case) – Solution in Such a Model
- Hawkins-Simon Condition & its Economic Interpretation

E. Basic Game Theory (15 Lectures)

- Basic Concepts & Assumptions of Game Theory
- Two-person Zero-Sum game with Saddle Point
- Concept of Dominance
- Elements of Non-Zero-sum Game
- Prisoner's Dilemma
- Concept of Nash Equilibrium
- Application in Economics: Theory of Oligopoly

F. Decisions Under Uncertainty (6 Lectures)

- Maximin, Maximax, Hurwicz, Laplace & Savage Criteria for Optimal Decision

REFERENCES

1. Knut Sydsaeter & Peter J. Hammond: *Mathematics for Economic Analysis* ((Pearson Educational Asia, Delhi, 2002)
2. Alpha C. Chiang & Kevin Wainwright: *Fundamental Methods of Mathematical Economics* (McGraw Hill International, 2005)
3. Lawrence Blume & Carl P. Simon: *Mathematics for Economists* (Viva Norton Student Edition, 2010; Viva Books Pvt. Ltd)
4. Dorfman, Samuelson & Solow: *Linear Programming & Game theory: A n Economic Analysis*
5. N. D. Vora: *Quantitative Techniques in Management* (Tata McGraw-Hill)
6. Sharma: *Operation Research-Theory and Applications* (Macmillan India Ltd)
7. E.T. Dowling: *Introduction to Mathematical Economics, Schaum's Outline Series* (McGraw- Hill)
8. Taro Yamane: *Mathematics for Economics*
9. W. J. Baumol: *Economic Theory and Operations Analysis* (Prentice Hall, 4th Edn. 2009)

Sample questions

1. Objective type questions (of 2 marks)

- a) Define a Linear Programming Problem.
- b) Explain the concept of a differential equation with the help of an example.
- c) How is the order of a difference equation determined?
- d) Define a Saddle Point in a pay-off matrix.
- e) What is Hurwicz criterion for decision?
- f) What do you mean by input output analysis?
- g) What are the assumptions of a game theory?



h) When is a Cobweb Model divergent?

2. Short answer type questions (of 5 marks)

- Solve the equation $5dy - (25y + 125)dt = 0$ given the condition that $y(t=0)=2$.
- Write down the economic interpretation of duality in Linear Programming.
- What are the assumptions of a Leontief Static Open Model (2×2) case?
- Explain Prisoner's Dilemma with an example.
- Obtain the solution of the equation $y_{t+1} - 2y_t = 4$, given that $y_t = 4$ when $t=0$.

3. Long answer type questions (of 10 marks)

- State Hawkins-Simon Condition for the viability of an economy. Explain the economic implications of these conditions.
- Describe Samuelson's Multiplier Accelerator Model as an application of second order linear difference equation.

SECOND YEAR: SEMESTER-III

(UG/SC/304/GE-3) *GE-3: One Course to be Chosen from Other Discipline*

Credit- 06 Full Marks: 50

Classes: Available in syllabus of respective discipline

SECOND YEAR: SEMESTER-III

(UG/ECO/305/SEC-1) *SEC-1: One Course to be Chosen from the Following Two*

SEC-1.1 DATA ANALYSIS

Credit- 02

Full Marks: 50

Classes: 30 (Lecture)

Credit- 02

Full Marks: 50

Classes: 25 (Lecture) + 5 (Lab classes)

Course Objective: This is a skill enhancement course for data analysis. This course will help students develop the understanding that they will need to make informed decisions using data, and to communicate the results effectively. The course is an introduction to the essential concepts, tools and methods of statistics for the students. The course is to be delivered through 25 classroom lectures and 5 computer lab classes.

Course Outcomes: On successful completion of this course the students will learn the followings.

- Sources of economic data and data type
- How to compute summary statistics and do some basic statistical inference
- Use of appropriate statistical technique to represent data.

Course Description

A. Statistical Data: Classification, Collection & Presentation

(07 Lectures + 2 Lab class)



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- Meaning of Statistical Data – Classification of Data -Variable & Attribute - Primary Data & Secondary Data - Methods of Collection of Data - Population & Sample - Complete Enumeration (Census) & Sample Survey- Random Sampling (Concept only).
- Tabulation & Diagrammatic Presentation of Data – Line, Bar & Pie Diagram.
- Frequency Distribution and its Diagrammatic Presentation: Construction of Frequency Distribution (Simple & Grouped) –Histogram, Ogive & Frequency Polygon.

B. Introductory Descriptive Statistics

(12 Lectures + 3 Lab class)

- Measures of Central Tendency – Mean, Median & Mode (Concepts & Formulae Only)
- Measures of Dispersion – Range, Mean Deviation, Standard Deviation, Coefficient of Variation (Concepts & Formulae Only)
- Concepts of Skewness & Kurtosis
- Concept of Simple Correlation & Regression

C. Interpretation of Indian Data

(06 Lectures)

- Economic Surveys – RBI Bulletins – Handbook of Statistics for the Indian Economy (RBI) – ASI Data –Census Data - Foreign Trade Statistics – NSS Data

REFERENCES

1. N. G. Das – *Statistical Methods* (Tata McGrawhill)
2. Nagar and Das – *Basic Statistics for Business and Economics*
3. Goon, Gupta and Dasgupta: *Basic Statistics*
4. R Spiegel and L.J. Stephen: *Statistics* (Schaum Series)
5. Official Website of RBI, Govt of India, CSO, NSS, ASI
6. Levine, D., Stephan, D., Szabat, K. (2017). *Statistics for managers using Microsoft Excel*, 8th ed. Pearson.

Sample question

1. When was the 1st census conducted in India?
2. Which government organisations in India responsible for survey data collection?
3. What are the types of statistical data?
4. What is the name of the organisation which conducts census after every 10 years
5. What is the full form of MOSPI,
6. What is the popular form of MSME in Indian Economy

SEC-1.2 RESEARCH METHODOLOGY

Credit- 02

Full Marks: 50

Classes: 30 (Lecture)

Course Objective

The course begins with the formulation of a research problem and covers the issues concerning the generation of primary sample data. In this regard the designing of a questionnaire, the methods of design of a sample and its size, the modes of data collection from direct interview to online surveys, the appreciation of possible sources of errors, and the cleaning of data forms the bulk of the classroom instruction.

Course Outcomes

The course imparts skills to undertake data based research. The student enrolling in this course would develop competency in executing sample surveys and would have reasonable exposure to a variety of secondary data sources.



Course Description

Unit-1

1. Understanding the Nature of Research
2. Formulation of the Research Topic
3. Review of Literature

Unit-2

1. Approaches to Research and Research Strategy
2. Research Ethics
3. Using Secondary Data
4. Using Primary Data – Collecting Data Through Observations/ Interviews/ Questionnaire

Unit-3

1. Sample Selection Methods
2. Analysing Data
3. Writing Project Report - Referencing Styles

REFERENCES

1. Ranjit Kumar: *Research Methodology-A Step by Step Guide for Beginners* (Sage Publications, 4th Edn.)
2. Uwe Flick: *Introducing Research Methodology- A Beginner's Guide to Doing a Research Project*, (Sage Publications)
3. J. Bethlehem: *Applied Survey Methods- A Statistical Perspective* (Wiley)
4. Wilkinson & Bhandarkar: *Methodology & Techniques of Social Research* (Himalaya Publishing)
5. C.R.Kothari: *Research Methodology*

Sample questions

1. Objective type questions (of 2 marks)

- a) What are the different source of secondary data?
- b) Distinguish between population and sample.
- c) Name the different types of data collection methods.
- d) What is research methodology?
- e) Distinguish between primary data and secondary data.
- f) What is the difference between qualitative and quantitative research?
- g) Mention the styles of reference writing?

2. Short answer type questions (of 5 marks)

- a) What is hypothesis? Discuss different types of hypothesis.
- b) What is questionnaire? Discuss the characteristics of a good questionnaire.
- c) What is review of literature? Discuss its role in research methodology.
- d) What are the basic requirements of report preparation? Discuss in brief.
- e) What do you mean by bibliography? Discuss the importance of bibliography in research.
- f) What is meant by sampling in research? Discuss various techniques of sampling



3. Long answer type questions (of 10 marks)

- Define research. Explain the process of research in detail.
- What are the various sources of data collection? Explain with examples.

SECoNd YEAR: SEMESTER-IV

(UG/ECO/401/ C-8)

*Core- 8: Statistical Methods for Economics- I*Credit- 06Full Marks: 50Classes: 60 (Lecture) + 15 (Tutorial)**Course outcome**

- To make the students familiar with Tabular and Diagrammatic Presentation of Data.
- To make the students familiar with Measures of Central Tendency.
- To make the students familiar with Measures of Dispersion.
- To explore the Correlation and Regression Analysis.
- To teach Index Numbers, Time Series, Population Statistics.

Course Description**B. Tabular and Diagrammatic Presentation of Data****(08 Lectures)**

- Statistical Data: Classification and Presentation (Tabular & Diagrammatic) – Difference between Variable and Attributes – Primary Data & Secondary Data - Methods of Collection of Data - Population & Sample - Complete Enumeration (Census) & Sample Survey.
- Frequency Distribution and its Diagrammatic Presentation: Construction of Frequency Distribution (Simple & Grouped) – Choice of Class Interval – Diagrammatic Representation of Frequency Distribution – Histogram & Frequency Curve – Cumulative Frequency Distribution (More Than and Less Than) – Ogive
- (Simple Numerical Exercise).

C. Measures of Central Tendency**(10 Lectures)**

- Arithmetic Mean, Median and Mode (for both Grouped and Ungrouped Data) – Comparison of Mean, Median and Mode – Geometric Mean and Harmonic Mean (for both Grouped and Ungrouped Data) – Composite Mean – Properties of All these Measures of Central Tendency
- (Simple Numerical Exercise).

D. Measures of Dispersion**(10 Lectures)**

- Absolute Measures – Range, Mean Deviation, Standard deviation and Quartile Deviation – Relative Measures of Variability – Coefficient of Variation, Coefficient of Mean Deviation & Coefficient of Quartile Deviation - Curve of Concentration - (Simple Numerical Exercise)
- Measurement of Economic Inequality: Gini Coefficient and Lorenz Curve-(Simple Numerical Exercise)
- Moments, Skewness and Kurtosis: Definitions – Relationship between Central and Non-central Moments – Sheppard's Correction – Different Measures of Skewness & Kurtosis - (Simple Numerical Exercise).

E. Correlation and Regression Analysis**(08 Lectures)**

- Scatter diagram – Covariance - Simple Correlation Coefficient and its Properties - Calculation of Simple Correlation Coefficient from Grouped and Ungrouped Data- Limitations of Correlation Coefficient.
- Simple Regression Analysis – Properties of Regression Line – Relationship between Correlation Coefficient and Regression Coefficient.
- Concept of Rank Correlation - Spearman's Rank Correlation Coefficient (Without Tie) - (Simple Numerical Exercise).
- Multiple & Partial Correlation (Concepts Only)

**F. Index Numbers****(08 Lectures)**

- ▣ Definition, Purpose and Uses of Index Numbers - Problems in the Construction of Index Numbers - Different Formulae for Price and Quantity Index Numbers - Tests for Index Numbers - Chain Index - Cost of Living Index Number
- ▣ (Simple Numerical Exercise)

G. Time Series**(10 Lectures)**

- ▣ Components of Time Series – Additive and Multiplicative Models - Analysis of Trend— Polynomial Trend – Exponential Trend – Non-linear Growth Curves – Measurement of Secular Trend: Free Hand Curve Fitting - Moving Average Method - Fitting Mathematical Curves
- ▣ Measurement of Seasonal Variation: Monthly (or Quarterly) Averages - Ratio to Moving Averages - Ratio to Trend
- ▣ (Simple Numerical Exercise)

H. Population Statistics**(06 Lectures)**

- ▣ Measurements of mortality: Crude Death Rate - Specific Death Rate - Standardized Death Rate - Mortality Index - Infant Mortality Rate.
- ▣ Measurements of Fertility: Crude Birth Rate - General fertility rate - Age-specific Fertility Rate - Total Fertility Rate - Gross Reproduction Rate - Net Reproduction Rate.
- ▣ Life Table & its Uses.

REFERENCES

1. Goon, Gupta and Dasgupta: *Basic Statistics*
2. Goon, Gupta and Dasgupta: *Fundamentals of Statistics, Vol. I & Vol. II*
3. Nagar and Das – *Basic Statistics for Business and Economics*
4. N. G. Das – *Statistical Method* (Tata McGrawhill)
5. Mathai & Rathie – *Probability and Statistics*
6. R Spiegel and L.J. Stephen: *Statistics (Schaum Series)*
7. Yule and Kendall – *An Introduction to the Theory of Statistics*
8. Gupta and Kapoor – *Fundamental of Mathematical Statistics.*

Sample questions**1. Objective type questions (of 2 marks)**

- a) Distinguish between primary data and secondary data
- b) Define an Ogive.
- c) What is meant by the term standard deviation?
- d) Explain the term Skewness used in connection with the frequency distribution of a continuous variable.
- e) What is the difference between correlation and regression?
- f) Calculate coefficient of correlation when Covariance of X and Y is 488 and Variance of X is 824 and Variance of Y is 325.
- g) What do you mean by a time series? What are its different components?
- h) What is a “cost of living index number”?

2. Short answer type questions (of 5 marks)



- a) What is meant by relative dispersion? Explain their uses.
- b) What is meant by moment of a distribution? Derive the expressions of central moment in terms of non-central moment's up to 4th order.
- c) The mean and SD of 20 items were found to be 10 and 2 respectively. At the time of checking it was found that one item 8, was incorrect. Calculate the mean and SD if (i) the wrong item is omitted and (ii) it is replaced by 12.

3. Long answer type questions (of 10 marks)

- a. Why are there two regressions lines? For the variables x and y , the two regression equations were obtained as $6x+4y=41$ and $8x+3y=43$. (i) Identify the two regression lines. (ii) Find the means of x and y , the correlation coefficient and the ratio of two standard deviations. (iii) What happens to the value of the correlation coefficient when the two regression lines are perpendicular to each other?

**SECOND YEAR: SEMESTER-IV****(UG/ECO/402/ C-9)****Core- 9: Indian Economy****Credit- 06****Full Marks: 50****Classes: 60 (Lecture) + 15 (Tutorial)****Course outcome**

- To explore India as a Developing Economy.
- To discuss about the Structural Changes in Indian Economy.
- To explore the Trends in Demographic Features in India from Different Census Data, Theory of Demographic Transition, Population Policy etc.
- To discuss about the Distributional Issues in India.
- To discuss about the Planning in India and Macroeconomic Policies & Policy Reforms.

Course Description**A. India as a Developing Economy****(Lectures)**

- ▣ Basic Features of the Indian Economy as a Developing Economy – Causes of Underdevelopment – Major Issues of Development

B. Structural Changes in Indian Economy**(06 Lectures)**

- ▣ Growth & Trends in National and Per Capita Income in India during the Post-independence Period - Sectoral Distribution of National Income and its Change Over Time.
- ▣ Occupation Structure & Economic Development - Changes in Occupation Structure in India Over Time (Post-independence period).

C. Population and Human Development**(07Lectures)**

- ▣ Study of Trends in Demographic Features in India from Different Census Data: Size & Growth Rate of Population – Density of Population - Birth & Death Rates – Infant Mortality Rate – Sex Ratio – Life Expectancy at Birth – Literacy Rates – Age Composition – Rural-Urban Distribution of Population & the Degree of Urbanisation Over Time.
- ▣ Three Stage Theory of Demographic Transition in the Indian context.
- ▣ Demographic Dividend and the Window of Opportunity
- ▣ Population Policy

D. Distributional Issues in India**(15 Lectures)**

- ▣ Inequality in the Distribution of Income & Wealth: Evidences of Inequalities and Concentration of Wealth & Economic Power – Causes of Inequality.
- ▣ Poverty: Concept and Measurement Issues – Extent & Trends – Poverty Eradication Policy – Evaluation of Major Poverty Eradication Programmes undertaken by the Govt. Of India.
- ▣ Unemployment: Nature, Types and Extent of Unemployment in India - Government Policy in Removing Unemployment
- ▣ Unorganized Labour Market: Size & Nature of Unorganised Sector in India – Problems of Female Labour and Child Labour.

E. Planning in India**(10 Lectures)**

- ▣ Definition of Economic Planning – Basic Types: Comprehensive & Partial Planning – Centralised Planning & Decentralised Planning – Structural Planning & Financial Planning – Rolling Plan & Fixed Plan – The Rationale for Planning in Mixed Developing Economies like India.
- ▣ Planning Authority in India: National Development Council – Planning Commission – NITI Aayog
- ▣ Broad Objectives of Planning in India: Evolution of India's Development Goals & Strategies
- ▣ Achievements & Failures of India's Five Year Plans.

**F. Macroeconomic Policies & Policy Reforms****(18 Lectures)**

- ☐ Monetary Policy: Structure of Indian Money Market – Objectives & Instruments of RBI's Monetary Policy – Bank Nationalisation & its Achievements – Reforms in the Banking Sector & Non-Bank Financial Intermediaries since 1991 – Capital Market in India and its Reforms since 1991.
- ☐ Fiscal Policy: Objectives and Components of Fiscal Policy – Preparation of Union Budgets – Different Components of the Budget & Different forms of Budget Deficits - Fiscal Federalism in India: Centre –State Financial Relations – Tax Reforms since 1991.

REFERENCES

1. Datt and Sundharam: *Indian Economy* (S. Chand, Latest Edition)
2. Misra and Puri: *Indian Economy* (Himalaya Publishing House, Latest Edition)
3. Uma Kapila (Ed.): *Indian Economy Since Independence* (Academic Foundation, 19th Edn.)
4. Sukhamoy Chakraborty: *Development Planning: The Indian Experience* (OUP)
5. Ahluwalia & Little (Ed.): *India's Economic Reforms and Development* (OUP)
6. Joshi & Little: *India's Economic Reforms 1991-2001* (OUP)
7. Bimal Jalan (Ed.): *The Indian Economy* (OUP)
8. T. N. Srinivasan: *Eight Lectures on India's Economic Reforms* (OUP)
9. C D. Wadhwa: *Some problems of India's Economic Policy* (Tata McGraw Hill).
10. J. Sachs, A Varshney and N Bajpai (ed): *India in the Era of Economic Reforms* (Oxford University Press).
11. Y.V. Reddy: *Economic Policies & India's Reform Agenda – New Thinking* (Orient Blackswan)

Sample questions**1. Objective type questions (of 2 marks)**

- (a) Mention two main causes of economic backwardness of India.
- (b) Which sector contributes the most in India's national income?
- (c) What is sex ratio?
- (d) What do you mean by disguised unemployment?
- (e.) When was the first five year plan in India launched?
- (f) What is 'Rolling Plan'?
- (g) When were the banks nationalized first in India?

2. Short answer type questions (of 5 marks)

- (a) write a brief note on sectoral distribution of National Income in India?
- (b) Examine some features of India as a developing economy .
- (c) Discuss some of the major achievements of India's five year plans.
- (d) Write a note on population policy of India.
- (e) Discuss the major arguments for Bank Nationalism in India.

3. Long answer type questions (of 10 marks)

- (a) Write a short note on Center –State financial relation in India.
- (b) Evaluate the different poverty alleviation programmes that have been taken in India.

**SECOND YEAR: SEMESTER-IV****(UG/ECO/403/ C-10)*****Core- 10: Development Economics***Credit- 06Full Marks: 50Classes: 60 (Lecture) + 15 (Tutorial)**Course outcome**

- To explore the Meaning of Economic Development along with Alternative Approaches.
- To explore the Characteristics of Underdevelopment & Obstacles to Development.
- To explain the Classic Theories of Economic Growth & Development
- To make the students familiar with Development Strategies.
- To explain the theories of Poverty, Inequality & Development and the Roles of Market & State in Development Policymaking.

Course Description**A. Meaning of Economic Development: Alternative Approaches (08 Lectures)**

- ▢ Traditional View of Economic Development: The Income Approach: Use of National & Per Capita Income as Index of Economic Development – Difference between Growth and Development - Shortcomings of the Income Approach.
- ▢ The Modern View of Economic Development: PQLI– Basic Needs Approach – Sen’s Capabilities Approach – Three Core Values of Development - Human Development Index: Construction & Interpretation – Objectives of Development & The Millennium Development Goals.
- ▢ Some Concepts of Development: Top-Down Development, Participatory Development, Inclusive Development & Sustainable Development

B. Characteristics of Underdevelopment & Obstacles to Development (10 Lectures)

- ▢ Defining the Developing World – Common Features of Underdevelopment
- ▢ Obstacles to Development: Trap Models – Vicious Circle of Poverty - Critical Minimum Effort Thesis – Low Level Equilibrium Trap – Dualism - Process of Cumulative Causation

C. Classic Theories of Economic Growth & Development (12 Lectures)

- ▢ Development as Growth & the Transition Theories: Clark and Fisher Theory on Change in Sectoral Share - Rostow’s Stages of Economic Growth
- ▢ Structural–Change Models: The Lewis Theory of Economic Development with Unlimited Supplies of Labour
- ▢ Dependency School: Development & Underdevelopment as a Historical Process - Dependency Theory of Baran – Frank’s Theory of Colonial Exploitation – Merchant Capital in Shaping Underdevelopment (Kay’s theory) – Emmanuel’s Theory of Unequal Exchange

D. Development Strategies (10 Lectures)

- ▢ Balanced Growth Vs. Unbalanced Growth – The Big Push Theory of Development
- ▢ Concept of Surplus Labour & Disguised Unemployment – Surplus Labour as Potential Saving
- ▢ Capital Intensive Vs Labour Intensive Technique – Choice of Technique in a Labour Surplus Economy.
- ▢ Export Promotion Vs Import Substitution.

E. Poverty, Inequality & Development (10 Lectures)

- ▢ Concepts & Measurement of Poverty: (i) Income Measure of Poverty – Poverty Line - Headcount Index (HI) – Poverty Gap Measure – Income Gap Measure – (ii) Capability Measure of Poverty: Human Poverty Index (HPI)
- ▢ Concepts & Measurement of Inequality: (i) Distributional Inequality of Income – Size Distribution of Income – Lorenz Curve & Gini Coefficient – (ii) Functional Distribution of Income
- ▢ Inequality & Development: Kuznets’ Inverted-U Hypothesis.
- ▢ Gender Discrimination: Women and Poverty – Measures of Women Development: Gender related Development Index (GDI) – Gender Empowerment Measure (GEM)

**F. The Roles of Market & State in Development Policymaking****(10 Lectures)**

- ☐ The Role of The State: Arguments for State Intervention in LDCs
- ☐ Development Planning: Meaning & Nature of Development Planning - The Rationale for Development Planning in Mixed Developing Economies
- ☐ The Crisis in Planning: Problems of Plan Implementation & Plan Failure – Reasons thereof
- ☐ Govt. Failures & The Resurgent Preference for Markets over Planning – The Market Economy: Merits & Demerits - Role & Limitations of the Market in LDCs
- ☐ Concept of Decentralised Planning

REFERENCES:

1. M. P. Todaro & Stephen C. Smith: *Economic Development* (Pearson, 10th Edn. 2012)
2. A. P. Thirlwall: *Growth and Development* (Macmillan)
3. Debraj Ray: *Development Economics* (Oxford University Press, 2009)
4. Meier & Rauch (ed): *Leading Issues in Economic Development* (Oxford University Press)
5. K. Basu: *A Critique of Less Developed Economy*
6. Partha Dasgupta: *Economics, A Very Short Introduction* (Oxford University Press, 2007)
7. Amartya Sen: *Development as Freedom* (OUP, 2000)
8. Sampat Mukherje: *Contemporary Development Economics* (New central Book agency)
9. Misra & Puri: *Economics of Development & Planning* (Himalaya Publishing)
10. Debes Mukherjee: *Development, Policies, Problems and Institutions* (New Central Book Agency)

Sample questions**1. Objective type questions (of 2 marks)**

- a) Distinguish between Economic Growth and Economic Development.
- b) What is meant by Sustainable Development?
- c) What is a Dual Economy?
- d) What do you mean by Disguised Unemployment?
- e) 1. Distinguish between Labour-Intensive and Capital-Intensive techniques of production
- f) What is Gender-related Development Index (GDI)?
- g) What do you mean by Optimum Population?

2. Short answer type questions (of 5 marks)

- a) Briefly explain the concept of Vicious Circle of Poverty.
- b) Discuss, in brief, the impact of population growth on economic development.
- c) Discuss briefly Leibenstein's Critical Minimum Effort Thesis.
- d) What is meant by Balanced Growth? State the arguments given in favour of Balanced Growth Strategy.
- e) What do you mean by Economic Planning? Discuss, in brief, the rationale for economic planning in developing countries. planning in a developing mixed economy.

3. Long answer type questions (of 10 marks)

- a) What do you mean by Human Development Index (HDI)? Explain the method of construction of Human Development Index.
- b) Describe the Lewis Model of economic development with unlimited supplies of labour.

**SECOND YEAR: SEMESTER-IV****(UG/SC/404/GE-4) GE-4: One Course to be Chosen from Other Discipline****Credit- 06 Full Marks: 50****Classes: Available in syllabus of respective discipline****SECOND YEAR: SEMESTER-IV****(UG/ECO/405/SEC-2) SEC-2: One Course to be Chosen from the Following Two:****SEC-2.1 ENTREPRENEURSHIP DEVELOPMENT****Credit- 02****Full Marks: 50****Classes: 30 (Lecture)****Course outcome**

- The learners will learn about the concepts of entrepreneur and entrepreneurship.
- They will also gain knowledge about the procedure for establishing of a new enterprise
- The learners would also learn about the various licensing and partnership acts
- The learners will acquire a better understanding about the different institutional support and services available in India for entrepreneur

Course Description**A. Evolution of the Concept of Entrepreneur****(05 Lectures)**

- Basic Features - Entrepreneurship and Economic Development - Growth of Entrepreneurship in India— Role of Entrepreneurship in Economic Development - Problem of Rural Entrepreneurship in India – Opportunities for an Entrepreneurial Career.

B. Entrepreneurship Motivation**(06 Lectures)**

- Meaning of Motivation – Basic Elements of the Process of Motivation – Motivating Factors: Internal Factors & External Factors – Ambitious, Compelling & Facilitating Factors
- Motivation Theories: Maslow's Need Hierarchy Theory – McClelland's Acquired Needs Theory
- Achievement Motivation – The Kakinada Experiment

C. Project Identification & Selection**(05 Lectures)**

- Meaning of Project- Attributes of a Project – Project Classification
- Project Selection
- Project Report/ Business Plan – Meaning & Significance of Project Report – Contents of a Project Report
- Planning Commission's Guidelines for Formulating a Project Report

D. Financial Resources For New Ventures**(09 Lectures)**

- Need for Finance in A Business Enterprise - Sources of Finance – Internal & External
- Capital Structure - Difference between Capital Structure & Financial Structure – Optimum Capital Structure – Factors Determining Capital Structure.
- Institutional Support to Enterprises – Need For Institutional Support - National Small Industries Board – State Small Industries Development Corporation--- District Industries Centre--- Industrial Estates

E. Growth Strategies in Small Business**(05 Lectures)**

- Enterprise Life Cycle: Stages of Growth

**REFERENCES:**

1. S.S Khanka: *Entrepreneurial Development* (S. Chand & Company Ltd)
2. Bill Bolton and John Thompson: *Entrepreneurs: Talent, Temperament and Technique* (Butterworth and Heinemann).
3. David .H Holt: *Entrepreneurship- New Venture Creation*
4. Poornima .M. Charantimath: *Entrepreneurship Development and Small Business Enterprises* (Pearson)

Sample questions**1. Objective type questions (of 2 marks)**

- (a) Mention some sources of finance of New Venture.
- (b) Mention two problems faced by a rural entrepreneur.
- (c) What are the factors that motivate people to go into business?
- (d) Mention some factors that determine Capital Structure.
- (e) What do you mean by Merger?
- (f) What is the main function of SIDO?
- (g) Write the basic characteristics of an Entrepreneur.
- (h) What do you mean by Business Plan?

2. Short answer type questions (of 5 marks)

- (a) Explain the growth of Rural Entrepreneurship in India.
- (b) Explain the need for growth of a business.
- (c) What is the difference between Capital Structure and Financial Structure?
- (d) Discuss the role of IDBI in financing small enterprises in the country.
- (e) Explain the internal motivational factor of a successful entrepreneur.
- (f) How is a project report formulated? Give an overview.

3. Long answer type questions (of 10 marks)

- (a) Briefly discuss the motivations and outcome of Kakinada Experiment.
- (b) Discuss the needs of institutional support to Small Scale Enterprises

SEC-2.2

BASIC COMPUTER APPLICATIONS

Credit- 02Full Marks: 50Classes: 15 (Lec.) +15

Course Objective: This is a skill enhancement course for Basic Computer Application. From this course student will learn theoretical and practical concepts relevant to the computer application in the field of economics. The objective of the course is to make the student market ready for basic data analysis in the field of business and economics. The course is to be delivered through 15 classroom lectures and 15 practical classes.

Course Learning Outcomes: On successful completion of this course the students will expected to have the followings.

1. Exposure to word processing, data processing software
2. Acquire skill on analysis of socio economic data, reporting and presentation of data using suitable computer software
3. Better employability through skill building as per the market need



Course Description

A. Basic Computer Application and Internet

Components of a computer; basic understanding of hardware and software. The File and folder management. Steps in installation of software; steps in printing. Internet, Internet; E-mail; Opening a Google account; Google drive; Google form; Google document; Google classroom; Google meet; Virtual machine sharing and remote access (TeamViewer, Anydesk etc.)

B. Word Processing

☐ Basic Features of Text formatting - Creating Documents - Heading Styles - Creating Reference Lists.

C. Introduction to Excel/Spreadsheet for Economic Analysis of Data

☐ Types of Data – Time Series, Cross Section –Excel Basic – Data Entry & Creation of Tables - Formula and Functions - Sort and Filter.

D. Graphical Representation of Data Sets

☐ Pie Chart, Bar Chart, Histogram, Frequency Polygon, Ogive, Bivariate Scatter Diagram.

E. Using Spreadsheet / Excel for Calculation of Descriptive Statistics

☐ Mean, Median, Mode, Standard Deviation, Simple Correlation, and Regression.

F. Presentations

☐ Creating Presentations - Pasting Charts etc in Presentations - Exporting Presentations as PDF.

REFERENCES:

- Ash Narayan Sah: *Data Analysis Using Microsoft Excel* (Excel Books India)
- Gray Koop: *Analysis of Economic Data* (John Wiley & Sons Ltd)
- Richard L.Kerns: *Essentials of Microsoft Windows, Word & Excel* (Prentice Hall India)
- V. RajaRaman: *Fundamentals of Computers* (PHI, New Delhi)
- Stephan Levine & Krehbiel Berenson: *Statistics for Managers Using Microsoft Excel* (PHI Learning)
- Leon & M. Leon: *Introduction To Computers with MS Office* (TMH)

Sample questions

1. “Ctrl + Z” is the shortcut key for

- a. Save file
- b. Cut
- c. Paste
- d. Undo

2. Word Processing software is also known as

- a. MS Word
- b. MS Excel
- c. MS Paint
- d. MS Windows

3. In MS Word what is gutter margin?



- a. Margin that is added to the left margin when printing
 - b. margin that is added to right margin when printing
 - c. Margin that is added to the binding side of page when printing
 - d. Margin that is added to the outside of page when printing
4. In MS Word which can be used for quick access to commonly used comments and tools
- a. Status bar
 - b. Tool bar
 - c. Menu bar
 - d. Title bar
5. Which teams are placed at the end of a document
- a. Footer
 - b. Foot Note
 - c. End Note
 - d. Header
6. A number of letter that appears little above the normal text
- a. Superscript
 - b. Subscript
 - c. Supertext
 - d. Toptext
7. A number of letter that appears little below the normal text
- a. Superscript
 - b. Subscript
 - c. Supertext
 - d. Below text

THIRD YEAR: SEMESTER-V

(UG/ECO/501/ C-11) Core- 11: Statistical Methods for Economics- II

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Course outcome

- To conceptualize the Theory of Probability.
- To explain the Random Variables and Mathematical Expectation.



- To explore the Univariate Probability Distributions.
- To discuss about the Joint Probability Distribution.
- To make the students familiar with Sampling Theory and Sampling Distributions.

Description of Course

A. Theory of Probability (10 Lectures)

- ▢ Basic Concepts: Meaning of Probability - Random Experiments – Trials - Sample or Outcome Space – Events - Mutually Exclusive, Equally Likely & Exhaustive Events – Complement of an event.
- ▢ Definitions of Probability: Classical Definition & its Limitations – Frequency or Empirical Definition - Axiomatic Definition
- ▢ Theorems of Probability: Theorem of Total Probability - Theorem of Compound Probability
- ▢ Conditional Probability & Statistical Independence - Bayes' Theorem.
- ▢ (Simple Numerical Exercise).

B. Random Variables and Mathematical Expectation (06 Lectures)

- ▢ Definition of Random Variables – Discrete & Continuous Random Variables - Distribution Functions of Random Variables – Probability Mass and Density Functions – Expectation and Variance of Random Variables.

C. Univariate Probability Distributions (11 Lectures)

- ▢ Discrete Probability Distribution: Binomial and Poisson Distributions – Properties - Mean, Variance & Moment Generating Functions.
- ▢ Continuous Probability Distribution: Normal & Standard Normal Distribution - Properties - Mean, Variance, Skewness & Kurtosis – Importance of Normal Distribution in Statistics.

D. Joint Probability Distribution (05 Lectures)

- ▢ Joint Probability Distribution of Two Random Variables – Marginal and Conditional Distribution - Idea of Independence - Expectation of the Product of Two Variables - Covariance between Two Variables as a Measure of Association

E. Sampling Theory and Sampling Distributions (12 Lectures)

- ▢ Elementary Sampling Theory: Population and Sample – Parameter and Statistic – Random Sampling – SRSWR & SRSWOR - Practical Methods of Drawing Random Samples – Random Sampling Numbers – Sampling Distribution – Standard Error
- ▢ Sampling Distributions: Sampling Distributions Associated with Normal Population - Expectation and Standard Error of Sample Mean - Chi-Square Distribution, Student's t Distribution, F-Distribution (Definition and Important Properties and Uses only)

F. Estimation and Testing of Hypothesis (16 Lectures)

- ▢ Fundamental ideas of Statistical Inference – Difference between Estimation and Testing of Hypothesis
- ▢ Basic Concepts of Estimation: Desirable Properties of Estimators – Unbiasedness, Minimum Variance, Efficiency, Consistency – Simple Methods of Point Estimation – Maximum Likelihood Estimators and their Properties – Interval Estimation – Confidence Intervals – Confidence Coefficient.
- ▢ Testing of Hypothesis: Null Hypothesis & Alternative Hypothesis– Level of Significance & Critical Region – Two-tailed & One-tailed Tests – Type-I and Type-II Errors– p-value – Steps in Testing of Hypothesis– Simple Applications of Tests for the Mean and Variance of a Univariate Normal Population.

REFERENCES

1. Nagar and Das – *Basic Statistics for Business and Economics*
2. Mathai & Rathie – *Probability and Statistics*
3. Goon, Gupta and Dasgupta: *Fundamentals of Statistics, Vol. I & Vol. II*
4. R Spiegel and L.J. Stephen: *Statistics (Schaum Series)*
5. Sheldon Ross: *A First Course in Probability* (Pearson 9th Edn.)
6. E. Rukmangadachari: *Probability and Statistics* (Pearson)



7. R. V. Hogg, E. A. Tanis & J. M. Rao: *Probability and Statistical Inference* (Pearson)
 8. N. G. Das – *Statistical Method (Vol. II)*, (Tata McGrawhill)

Sample questions

1. Objective type questions (of 2 marks)

- What do you mean by mutually exclusive events?
- State Bayes' Theorem.
- Mention two importances of Normal Distribution in Statistics.
- Distinguish between a parameter and a statistic.
- State the properties of a good estimator.
- Define a random variable with an example.
- Define a Chi-square distribution.
- Distinguish between Type-I and Type-II errors in Statistics.

2. Short answer type questions (of 5 marks)

- What is the probability of getting 3 white balls in a draw of 3 balls from a box containing 5 white and 4 black balls?
- A coin is tossed 3 times and x is a random variable denoting the number of heads occurring. Determine the mathematical expectation of x .
- State and prove the product law of expectation.
- What are the different methods of drawing a simple random sample from a population?
- The mean life of a sample of 100 electric bulbs produced by a company is found to be 1570 hours with a standard deviation of 120 hours. If μ is the mean life time of all the bulbs produced by the company, then test the hypothesis $\mu = 1600$ hours against the alternative hypothesis $\mu \neq 1600$ hours, using a level of significance of $\alpha = 0.05$.
- Do you think that Normal Distribution is a continuous theoretical distribution? Write down the probability mass function of a Poisson Distribution.

3. Long answer type questions (of 10 marks)

- Determine the mean and standard deviation of a Binomial Distribution with parameters n and p .
- Define simple random sampling. Distinguish between simple random sampling with replacement (SRSWR) and simple random sampling without replacement (SRSWOR). from a finite population. What is standard error of a statistic?

THIRD YEAR: SEMESTER-V

(UG/ECO/502/ C-12) **Core- 12: International Economics**

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Course outcome

- To generalize the Basic Concepts & Tools of Trade Theory.
- To explore the Classical Theories of Trade and the Neoclassical Modification of The Ricardian Theory.
- To make the students familiar with International Equilibrium and Terms of Trade.
- To explore the Neoclassical Trade Models and Theories of Trade Restriction.
- To explain the Balance of Payments and Exchange Rate.



Course Description

A. Introduction (01 Lecture)

- ☐ Nature & Scope of International Economics

B. Basic Concepts & Tools of Trade Theory (06 Lectures)

- ☐ Internal and International Trade - Inter-Industry and Intra-Industry Trade – Free Trade & Protection
- ☐ Basis of Trade: Arbitrage as Basis of International Trade – Sources of Cross-country Price Difference and Arbitrage - Absolute and Comparative Advantages – Sources of Comparative Advantage: Genuine & Perverse.
- ☐ Analytical Tools: Community Indifference Curves – Opportunity Cost & Production Possibility Curves – Offer Curves – Concepts, Derivation & Properties.

C. Classical Theories of Trade (06 Lectures)

- ☐ Assumptions of Classical Theories of Trade – Absolute Advantage Theory of Adam Smith and Gains from Complete Specialisation - Comparative Advantage Theory of David Ricardo and Gains from Complete Specialisation – Limitations of Classical Theory of Trade
- ☐ Generalization of Ricardian Model by Introducing More than Two Commodities and More than Two Countries.

D. Neoclassical Modification of The Ricardian Theory (06 Lectures)

- ☐ Analysis of Comparative Advantage and Gains From Trade (GFT) by Introducing the Concept of Opportunity Cost Instead of Labour Theory of Value – The Case of Incomplete Specialisation
- ☐ Decomposition of GFT: Specialisation and Exchange Gains – Substitution Possibilities and Magnitude of GFT – GFT of a Small Country.

E. International Equilibrium and Terms of Trade (02 Lectures)

- ☐ Offer Curves and Equilibrium Terms of Trade – Static Stability

F. Neoclassical Trade Models: Factor Endowment & Trade (15 Lectures)

- ☐ Heckscher–Ohlin Theory – Physical Vs. Price Definition of Factor Abundance – Differences in Factor Endowment as the Basis of Comparative Cost Difference and Basis of Trade.
- ☐ Commodity and Factor Prices under Trade – Factor Price Equalisation Theory (Heckscher–Ohlin–Samuelson Model)
- ☐ Rybczynski Theorem
- ☐ Empirical Studies – Leontief Paradox & its Explanations
- ☐ Factor Intensity Reversal and Factor Price Equalisation.

G. Theories of Trade Restriction (10 Lectures)

- ☐ Tariff & Non-Tariff Barriers
- ☐ Partial Equilibrium Analysis of Tariff & Quota – Dead-weight Loss of Tariff – Comparison between Tariff and Quota
- ☐ General Equilibrium Analysis of Tariff – The Stolper-Samuelson Theorem - Welfare effects of Tariff on Small Country and Large Country - Tariff-ridden Offer Curves and Optimum Tariff - Tariff war
- ☐ The Infant Industry Argument

H. Balance of Payments and Exchange Rate (14 Lectures)

- ☐ Balance of Payments Accounts in an Open Economy – Fixed and Flexible Exchange Rates
- ☐ Balance of Payments & Problems of Adjustment: The Mechanism of Adjustment under Fixed Exchange Rates – Expenditure Reducing and Expenditure Switching Policies – Devaluation: the Elasticity and Absorption Approaches – Marshall–Lerner Condition - Mechanism of Adjustment under Flexible Exchange Rates.

REFERENCES

1. Rajat Acharyya: *International Economics* (Oxford University Press)



2. Soderstein, Bo: *International Economics*, (Macmillan, 2nd Edition)
3. R. Caves, J. Frankel and R. W. Jones: *World Trade and Payments* (Pearson Education, 9th Edn)
4. P. Krugman and M. Obstfeld: *International Economics* (Pearson Education, 8th Edn.)
5. Dominick Salvatore: *International Economics Trade & Finance* (Wiley Student Edition)

Question type

1. Objective type question (of 2 marks)

- a) Distinguish between internal trade and international trade.
- b) Distinguish between free trade and protection.
- c) What is a production possibility curve?
- d) Mention the names of two proponents of classical theory of trade.
- e) State the classical assumption of the labour theory of value.
- f) What is meant by factor intensity reversal?
- g) Define quota.
- h) What do you mean by Balance of Payments?

2. Short answer type question (of 5 marks)

- a) Distinguish between absolute and comparative cost advantage with suitable examples. Explain gains from trade under Ricardian theory of international trade.
- b) What is an offer curve? Explain how the terms of trade is determined by the offer curves of two trading countries.
- c) State Heckscher-Ohlin theory of international trade. Examine its empirical validity with the help of Leontief Paradox and give any two explanations of Leontief paradox.
- d) Explain the effects of tariff on international trade of a country with the help of partial equilibrium analysis.
- e) Explain the Infant Industry argument for protection.
- f) Distinguish between fixed and flexible exchange rates. Show the mechanism of adjustment under flexible exchange rates with the help of suitable diagram.

3. Long answer type question (of 5 marks)

- a) Discuss the arguments for and against free trade and protection.
- b) Analyse the elasticity approach to devaluation and state the Marshall-Lerner condition for successful devaluation

**THIRD YEAR: SEMESTER-V****(UG/ECO/503/DSE-1) DSE-1: One Course to be Chosen from the Following Two:****DSE-1.1: ECONOMICS OF HEALTH & EDUCATION**Credit- 06Full Marks: 50Classes: 60 (Lecture) + 15 (Tutorial)

DSEC1.

COURSE OUTCOME

- To explore the Role of Health & Education in Economic Development.
- Introducing Health Economics and Microeconomic Foundations of Health Economics..
- To explore the Health Care Financing and Market Failure & Course Description Rationale for Govt. Intervention.
- To explore Education as Investment in Human Capital and Demand For Education, Provision & Financing
- To explore Credentialism & Educational Inflation.

UNIT -I**A. Role of Health & Education in Economic Development****(04 Lectures)**

- ☐ Health and Education as the Basic Objectives as well as Vital Components of Growth & Development
- ☐ Investing in Health and Education – The Human Capital Approach - Physical Capital vs. Human Capital
- ☐ Education & Health as Joint Investments for Development – Linkages between Investments in Health & Education
- ☐ Importance of Health & Education in Poverty Alleviation

B. Introduction To Health Economics**(04 Lectures)**

- ☐ Definition & Scope of Health Economics
- ☐ Distinguishing Features of Health Economics
- ☐ General features of Health Care: Distinction Between Health & Health Care – Health as a Right – Health as a Consumption as well as an Investment Good

Perspectives of Health:



- Economic, Social and Cultural Factors Determining Health Status - Income, Consumption Patterns, Education, Occupational Hazards, Social Status, Gender, and Family Size etc.

C. Microeconomic Foundations of Health Economics: Demand and Supply of Health Care (08 Lectures)

- Demand for Health Care – A Derived Demand From Demand For Health – Determinants of Demand for Health & Health Care - The Problem of Supplier-Induced Demand
- Supply of Health Care: Health Care Delivery System – Production & Cost
- Economic Valuation of Health Care Programmes: Cost Effectiveness & Cost-Benefit Analysis of Health Care

D. Health Care Financing (07 Lectures)

- Different Sources of Health Care Funding: Public Sources - Private Sources – External Financing
- Scope of Health Insurance: Alternative Insurance Mechanisms - Social Health Insurances Sponsored or Mandated by the Government - Private (Voluntary) Health Insurance - Employers Based Health Insurance
- Difference between Private & Social Health Insurance
- The Role of Information, Uncertainty, Adverse Selection and Cost of Moral Hazard in Health Insurance Market

E. Market Failure & Rationale for Govt. Intervention (07 Lectures)

- Health Systems & Their Problems: Issues of Equity & Inequality, Misallocation, Inefficiency and Cost Explosion or Escalation
- Causes of Market Failure in the Provision of Health Services: Risk & Uncertainty, Asymmetric Information, Moral Hazard, Adverse Selection, Supplier-induced Demand, Externalities.
- The Role of Government: Encouragement of Schemes with Positive Externalities & Discourage Those with Negative Externalities –Compensate for Problems Generated by Uncertainty & Insurance Market Failure -

Provision of Cost-Effective Health Services to the Poor – Formulation of Effective Govt. Policies for Achieving Health for All.

Unit II

A. Education as Investment in Human Capital (06 Lectures)

- Investment Costs: Private & Social Costs - Direct Costs & The Opportunity Cost of Foregone Wages, Time & Effort
- Yield or Returns on Investment: Private & Social Returns - Effects on Income and Productivity – Positive Externalities
- Estimating Contribution of Education to Growth: The Denison Index – The Production Function Approach – The Ideas of Schultz – Arrow's Ideas of Learning by Doing

B. Demand For Education, Provision & Financing (12 Lectures)

- Demand for Education: A Derived Demand for High-Wage Employment Opportunities – Determinants of Demand: Wage or Income Differential, Probability of Getting Modern Sector Job, The Direct & Indirect Costs of Education, Gender, Social Status, Size of Family & So on
- Demand For Education & Economic Theory of Signaling: Acquiring Educational Credentials as Signal of Ability – Problem of Asymmetric Information & the Role of Signaling.
- Public vs. Private Provision & Funding: Education as a Public Sector Responsibility– Govt. Through Policies Produce Education Services – Private Sector Organizations Respond to Consumer Demand
- Debate on Public Funding of Education – The Issues of Efficiency & Equality & Social Cohesion
- Pre-Primary Education Financing: Early Childhood Care and Education as a Holistic and Multi-Sectoral Service – Economic Benefits Public Investment in Early Childhood Care & Education – Barriers & Challenges – Problem of Child Labour
- Education Policy: Governance of the Operation of Education Systems – Examples of Areas of Debate in Education Policy
- Supply-Demand Debate on Education Achievement

C. Credentialism & Educational Inflation (02 Lectures)

- Signaling, Increased Demand for Formal Educational Qualifications & The Devaluation of These Qualifications
- Concepts of Credential Creep/ Academic Inflation/ Degree Inflation & Grade inflation – Possible Problems of Grade Inflation –Arguments Against Taking Action on Grade Inflation.



Unit – III

An Overview of Health & Education Sectors in India

(10 Lectures)

- ☐ Health Outcomes: Trends in Health Indicators - Infant Mortality Rate, Life Expectancy, Maternal Mortality Rate, TFR etc. – Poor Health of an Average Indian – Disease Burden in India
- ☐ Health Systems: Health Care Infrastructure in India & a Brief Account of Shortfall in Comparison to Social Need – Disparity in Rural/Urban Health Care Facilities – Major Initiatives To Ensure Availability of Health Facilities for the Poor: NRHM, NUHM & AYUSH.
- ☐ Health Financing: Health Financing by The Centre & States – Health Insurance
- ☐ Literacy Rates, School Participation, School Quality Measures: Trends in Literacy Rates Over Time – Progress of Elementary Education – Enrolment Rates & Drop-Out Rates – Major Primary Education Schemes: Sarva Siksha Abhiyan, National Programme of Mid-Day Meals in Schools
- ☐ Overall Achievements & Failures of Education System in India

Gender & Caste Discrimination in Health & Education in India

REFERENCES

1. William Jack: *Principles of Health Economics For Developing Countries* (World Bank Institute Development Studies, 1999)
2. Michael P. Todaro & Stephen C. Smith: *Economic Development* (Pearson, 10th Edn.)
3. Debraj Ray: *Development Economics* (Oxford University Press, 2009)
4. A. P. Thirlwall: *Growth & Development* (Lynne Rienner Publishers)
5. Gerald M. Meier & James E. Rauch: *Leading Issues in Development* (Oxford University Press)
6. Sampat Mukherjee: *Contemporary Development Economics* (New Central Book Agency)
7. Blaug Mark: *Introduction to Economics of Education* (Penguin, London, 1972)
8. J. E. G. Tilak: *Economics of Inequality in Education* (Sage, New Delhi)
9. Datt & Sundharam: *Indian Economy* (S. Chand & Co., Latest Edition)
10. Misra & Puri: *Indian Economy* (Himalaya Publishing)
11. World Development Report, Investing in Health, The World Bank, 1993.

Sample questions

1. Objective type question (of 2 marks)

- a) Which method is based on Learning by doing?
- b) How degree inflation weakens the economy?
- c) Write the difference between Human capital and Physical capital.
- d) What does AYUSH stand for?
- e) What are the sources of financing in education in India?
- f) Define Maternal Mortality Rate.
- g) What services do health care provide?

2. Short answer type question (of 5 marks)

- a) Briefly discuss overall failures of Education system of India.
- b) How national program of Mid-Day meals in schools helped in progress of Elementary Education?
- c) Using graph, show positive externalities of education on market.
- d) “Increase in population is the liability for the country”- Do you agree? Give reason.
- e) How the problem of Child Labour can solve?
- f) Mention the economic benefits of public investment in Early childhood care and education.

3. Long answer type question (of 10 marks)

- a) (i) What do you mean by Grade Inflation? (ii) Discuss the arguments against taking action on Grade Inflation.



b) Discuss the Central-State relation on Health financing in India

dSE-1.2: ECONOMIC HISTORY OF INDIA

(1857-1947)

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Course Objective

This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the mechanisms that linked economic development in India to the compulsions of colonial rule.

Course Learning Outcomes

The course develops critical analytical skills and exposes students to understanding the intricacies of India's economic, political and social developments both in the past and present times. It increases their employability by enhancing their ability to deal with a variety of textual and statistical sources, and to draw upon them to construct a coherent argument. These skills would be useful in a variety of careers in academics, research, journalism and the government.

Course Description

B. Introduction

(02 Lectures)

- ☐ India's Colonial Background – Overview of the Colonial Economy

C. Macro Trends

(05 Lectures)

- ☐ National Income – Population - Occupational Structure.

D. Agriculture

(15 Lectures)

- ☐ Agrarian Structure and Land Relations – A Brief Review of Land Settlements - Major Tenancy Reforms & their Implications
- ☐ Commercialisation of Agriculture- Causes & Effects
- ☐ Famines & Famine Relief in India – Frequency, Nature and Causes of Famines.

E. Development of Railways and Irrigation

(08 Lectures)

- ☐ Causes & Economic Effects of Development of Railways – Development of Irrigation System -Railway Vs Irrigation Debate

F. Deindustrialization & Growth of Modern Industries

(15 Lectures)

- ☐ Meaning, Causes & Consequences of Deindustrialization - The Deindustrialization Debate
- ☐ Process of Industrial Transition in India - Evolution of Entrepreneurial and Industrial Structure - Nature of Industrialisation in the Interwar Period - Constraints to Industrial Breakthrough.

G. Economy and State in the Imperial Context

(15 Lectures)

- ☐ The Imperial Priorities and The Indian Economy: Forms & Consequences of Colonial Exploitation – Exploitation through International Trade and Capital Flows – Government and Fiscal policy – Theory of Economic Drain.



REFERENCES

1. R.C. Dutt: *Economic History of India (Vols. I & II)*
2. Dhiresb Bhattacharya: *A Concise Economic History of India*
3. V. B. Singh: *Indian Economic History*
4. Tirthankar Roy: *The Economic History of India 1857-1947* (Oxford University Press, 3rd edition)

Question pattern

1. Objective types questions (of 2 marks)

- a) Mention one feature of Indian irrigation system during 1857-1947.
- b) When and where was the first cotton mill of India set up?
- c) Write down one form of colonial exploitation that occurred through international trade and capital flow.
- d) What do you mean by colony?
- e) When did Bengal face serious famine during the British rule in India?
- f) Name the station of origin of Indian Railway from where it first steams off?
- g) Name the proponent of the theory of economic drain.
- h) What do you mean by Zamindari system?

2. Short answer types questions (of 5 marks)

- a. Explain the trends with regard to population growth in India for the period 1857-1947.
- b. Write down the causes of famine as faced by the Indian economy during 1857-1947.
- c. What are the factors that necessitated the development of railway network in India during British rule?
- d. Explain the Mahalwari system of land tenure.
- e. Write a short note on occupancy tenant.
- f. Explain the features of Indian economy as a colonial economy.

3. Long answer types questions (of 10 marks)

- a. Write about the causes and consequences of de-industrialisation as faced by Indian economy during 1857-1947.
- b. Explain the causes and effects of commercialisation of Indian agriculture in between the years 1857 and 1947.



THIRD YEAR: SEMESTER-VI

THIRD YEAR: SEMESTER-V**(UG/ECO/504/DSE-2) DSE-2: One Course to be Chosen from the Following Two:****dSE-2.1: ISSUES IN INDIAN ECONOMY**Credit- 06Full Marks: 50Classes: 60 (Lecture) + 15 (Tutorial)**Course outcome**

- To explore the Agriculture sector and its Performance & Policies.
- To explore the Industry sector and its Performance & Policies.
- To explore Service Sector in India.
- To discuss about the Foreign Sector Policy Reforms in India.

Course Description**A. Agriculture: Performance & Policies****(18 Lectures)**

- ☐ Production & Productivity: Trends in Agricultural Production & Productivity in India – Causes of Low Productivity – Farm Size & Productivity Debate
- ☐ Land Reforms: Meaning, Importance, Objectives & Salient Features - Evaluation of the Land Reform Measures.
- ☐ Green Revolution: Meaning and Features – Impact of Green Revolution on Agricultural Production & Productivity, Distribution of Income and on Regional Distribution – Causes of Uneven & Limited Spread.
- ☐ Rural Credit & Capital Formation in Agricultural Sector: The Problem of Rural Indebtedness and Need for Rural Credit – Different Sources of Short-term & Long-term Credit – Role of Cooperatives, Commercial Banks & Regional Rural Banks – Rural Credit & the Role of NABARD - Microfinance.
- ☐ Agricultural Marketing: Problems / Defects of Agricultural Marketing in India – Role of Co-operatives in Agricultural Marketing – Warehousing Facilities in India – Reforms in Agricultural Marketing with Special Reference to APMC Act.
- ☐ Food Security: Concept and Present State of Food Security in India – The Role of Public Distribution System in Providing Food Security
- ☐ Globalisation and Indian Agriculture.

B. Industry: Performance & Policies**(18 Lectures)**

- ☐ Industrial Production & Patterns: Trends in Industrial Production and Changes in Industrial Pattern during the Plans – Globalisation and Indian Industry.
- ☐ Industrial Policy and its Change Over Time: Features of Industrial Policy, 1956 and New Industrial Policy, 1991 – Industrial Licensing Policy – Competition Policy
- ☐ Public Sector: Meaning, Role, Performance & Problems of Public Sector Enterprises in India – Privatisation & Disinvestment Policy
- ☐ Problem Industrial Sickness & the Exit Policy
- ☐ Small Scale & Cottage Industries: Definition of Cottage and Small Scale Industrial Units – Role, Performance & Problems of Small-Scale and Cottage Industries in Indian Economy – Government Policy in respect of Small-Scale and Cottage Industries.

C. Service Sector in India**(06 Lectures)**

- ☐ Growth & Performance of Service Sector - Problems of Service-led Growth in India
- ☐ Indian IT Industry: Problems & Prospects

**THIRD YEAR: SEMESTER-VI****D. Foreign Sector Policy Reforms in India****(18 Lectures)**

- ☐ GATT, WTO and India
- ☐ Reforms in Foreign Trade Policy since 1991 – Exim Policies since 2000 - SEZ Policy
- ☐ Exchange Rate Policy: Changes in the System of Exchange Rate Management Over Time – (i) Par Value System (1947-71) – (ii) Pegged Regime (1971-92) – (iii) Liberalised Exchange Rate Management System (1992 -93) – (iv) Market Determined Exchange Rate Regime (1993 onwards)
- ☐ Current & Capital Account Convertibility of Rupee
- ☐ Reforms in Policy towards Foreign Direct Investment – FERA (1973) Vs. FEMA (1999)
- ☐ Impact of Policy Reforms on Foreign Trade and Balance of Payments.

REFERENCES

1. Datt and Sundharam: *Indian Economy* (S. Chand, Latest Edition)
2. Mishra and Puri: *Indian Economy* (Himalaya Publishing House, Latest Edition)
3. Uma Kapila: *Indian Economy – Issues in Development & Planning and Sectoral Aspects* (Academic Foundation, Latest Edn.)
4. Ahluwalia & Little (Ed.): *India's Economic Reforms and Development* (OUP)
5. Joshi & Little: *India's Economic Reforms 1991-2001* (OUP)
6. Bimal Jalan (Ed.): *The Indian Economy* (OUP)
7. T. N. Srinivasan: *Eight Lectures on India's Economic Reforms* (OUP)
8. C D. Wadhwa: *Some problems of India's Economic Policy* (Tata McGraw Hill).
9. J. Sachs, A Varshney and N Bajpai (ed): *India in the Era of Economic Reforms* (Oxford University Press).
10. Y.V. Reddy: *Economic Policies & India's Reform Agenda – New Thinking* (Orient Blackswan)
11. Soumyen Sikdar. *Contemporary Issues in Globalisation. An Introduction to Theory and Policy in India.* (Oxford University Press).

Question pattern**1. Objective types questions (of 2 marks)**

- a) What do you mean by low productivity in Indian agricultural sector?
- b) What is meant by land reforms?
- c) Write the full forms of NABARD and WTO.
- d) What is Exit Policy?
- e) What is SEZ Policy?
- f) Write down any two features of the industrial policy of 1990-91.
- g) Mention any two defects of agricultural marketing in India.

2. Short answer types questions (of 5 marks)

- a) Discuss the impact of green revolution on agricultural production in India.
- b) Analyse the structure of rural credit system in India.
- c) Write a short note on service-led growth in India during the last two decades.
- d) Discuss the trends in industrial production since the inception of five year planning in India.
- e) Analyse the importance of small scale and cottage industries in India and the problems faced by this sector
- f) Analyse the impact of liberalization policy on foreign trade and balance of payments in India.

3. Long answer types questions (of 10 marks)

- a) Discuss the impact of globalization on Indian agriculture.
- b) What do you mean by public sector? Critically analyse the performance of the public sector in India and the recent trend in privatization

**THIRD YEAR: SEMESTER-VI****DSE-2.2: MONEY & FINANCIAL MARKETS**Credit- 06Full Marks:Classes: 60 (Lecture) + 15 (Tutorial)**Course Objective**

This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organisation, structure, and role of financial markets and institutions. It also discusses interest rates, monetary management, and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.

Course Learning Outcomes

This allows students to understand current monetary policies and financial market outcomes. It also enables them to critically evaluate policies.

Course Description**A. Money****(06 Lectures)**

- ☐ Definition of Money – Kinds of Money: Fiduciary/ Debt/ Credit Money – Coins, Paper Currency & Deposit Money - Legal Tender or Fiat Money and Non-legal Tender or Credit Money Proper - Limited & Unlimited Legal Tender – e-Money & Plastic Money – Functions of Money – Money Vs. Near Money – Examples of Near Money - Value of Money – High-powered Money or Monetary Base - Measures of Money Supply.

B. Overview of The Financial System**(08 Lectures)**

- ☐ Meaning & the Role/Functions of the Financial System - Constituents of the Financial System: Financial Assets/ Instruments; Financial Intermediaries/ Institutions; and Financial Markets
- ☐ Definition & Role of Financial Markets – Distinction between Money Market & Capital Market
- ☐ Definition & Role of Financial Intermediaries – Classification of Financial Intermediaries: Banks and Non-Bank Financial Institutions (NBFIs)
- ☐ Financial Assets/Instruments: Distinction between Primary & Secondary Securities – Debt & Equity Instruments of Various Types – Bonds, Shares, Debentures etc. - Various Forms of Derivative Instruments (Forward Contract, Future Contract, Options, Swaps)
- ☐ Problem of Asymmetric Information - Adverse Selection & Moral Hazard.

C. Money Market**(06 Lectures)**

- ☐ Features, Importance & Functions of the Money Market - Characteristics of Developed and Underdeveloped Money Markets
- ☐ Components of Money Market: Call Money Market - Commercial Bill Market - Treasury Bill Market – Repo & Reverse Repo Markets.

D. Capital Market**(14 Lectures)**

- ☐ Features, Importance & Functions of the Capital Market - Characteristics of Developed and Underdeveloped Capital Markets
- ☐ Components of Capital Market: Gilt-edged Market and the Industrial Securities Market – Distinction between Primary Market and Secondary Market
- ☐ Features, Role & Functions of Stock Market or Stock Exchange – Stock Index – SENSEX & NIFTY
- ☐ Indian Stock Market & the Role of SEBI

E. Banks: Commercial Banks & The Central Bank**(15 Lectures)**

- ☐ Definition & Functions of Commercial Banks – Asset or Portfolio Management by Commercial Banks -

**THIRD YEAR: SEMESTER-VI**

Concepts of Primary & Derivative Deposits and the Process of Credit Creation by Commercial Banks – Role of Commercial Banks in Economic Development.

- ▣ Definition & Functions of Central Bank – Distinction between Central Bank & Commercial Banks – Central Bank & Monetary Policy: Definition, Goals, Targets, Indicators & Instruments of Monetary Policy – Various Types of Quantitative & Qualitative Instruments of Monetary Control.

F. Non-Bank Financial Intermediaries (05 Lectures)

- ▣ Distinction Between Commercial Banks & NBFIs – Validity of the Distinction - Examples of NBFIs – Development Banks, Mutual Funds, Insurance Companies - Central Bank's Control Over NBFIs.

G. Financial Markets and Interest Rates Behaviour (06 Lectures)

- ▣ Concept of Interest: Gross & Net Interest - Real & Nominal Interest Rates – Sources of Interest Rate Differentials – Meaning of Term Structure of Interest Rates - Theories of Term Structure of Interest Rates: The Expectations Theory – The Liquidity or Risk Premium Theory – The Market Segmentation Theory

REFERENCES

1. Suraj B. Gupta: *Monetary Economics- Institutions, Theory & Policy* (S.Chand & Co)
2. S. Gursami: *Indian Financial System* (Tata McGraw Hill)
3. L. M. Bhole: *Financial Institutions and Markets* (Tata McGraw Hill).
4. R. R. Paul: *Monetary Economics* (Kalyani Publishers)
5. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions* (Pearson Education)
6. F. J. Fabozzi, F. Modigliani, F. J. Jones & M. G. Ferri: *Foundations of Financial Markets and Institutions* (Pearson Education).
7. M. Y. Khan: *Indian Financial System* (Tata McGraw Hill).

Question pattern**1. Objective types questions (of 2 marks)**

- (a) What is Cash Reserve Ratio?
- (b) Define e-money.
- (c) What is Derivative?
- (d) What is financial instrument?
- (e) Define Money Market.
- (f) What do you mean by Asymmetric Information?
- (g) What are Non-Bank Financial Institutions?
- (h) What is Reserve Repo Rate?

2. Short answer types questions (of 5 marks)

- (a) What are the functions of financial system?
- (b) Differentiate between primary market and secondary market.
- (c) What are the advantages and disadvantages of financial intermediaries?
- (d) What is debt instrument? Discuss various types of debt instrument.
- (e) What are the characteristics of underdeveloped money market?
- (f) Define the role of commercial banks in economic development.

3. Long answer types questions (of 10 marks)

- (a) What is Central bank? What are the functions of central bank?



THIRD YEAR: SEMESTER-VI

THIRD YEAR: SEMESTER-VI

(UG/ECO/601/ C-13) **Core- 13: Introductory Econometrics**Credit- 06Full Marks: 50Classes: 60 (Lecture) + 15 (Tutorial)**Course outcome**

- Introducing Definition & Scope of Econometrics, Types, Relationship between Econometrics and Economic Theory, Aims /Objectives of Econometrics etc.
- Introducing Classical Linear Regression Model (Two Variable Case).
- Introducing Multiple Regression: The CLRM (Three Variable Case).
- To conceptualize Dummy Variable.
- To explore the Specification Problem. Course Description

A. Introduction**(10 Lectures)**

- ☐ Definition & Scope of Econometrics – Types: Theoretical and Applied Econometrics - Relationship between Econometrics and Economic Theory – Aims /Objectives of Econometrics – Characteristics of Econometrics – Methodology or Stages of Econometric Research - Economic and Econometric Models – Desirable Properties of an Econometric Model - Limitations of Econometrics.

B. The Classical Linear Regression Model (Two Variable Case)**(20 Lectures)**

- ☐ Specification of the Relationship between the Variables – Introduction of Error / Disturbance Term & the Reasons / Logic behind the Inclusion of Error Term –The Ordinary Least Squares (OLS) Method of Estimation: The OLS Assumptions & their Implications – Estimation of the Parameters – Properties of the OLS Estimators – BLUE (Gauss-Markov Theorem) – Variance of the Error Term – Statistical Inference in the CLRM: Confidence Intervals for the Estimated Parameters and Testing of Regression Coefficients — Goodness of Fit - The Coefficient of Determination, R^2 – (Simple Numerical Problems).

C. Multiple Regression: The CLRM (Three Variable Case)**(15 Lectures)**

- ☐ Specification of the Classical Linear Regression Model with Two Explanatory Variables – Application of OLS Method for Estimation of the Parameters of the Model.
- ☐ Violation of the Assumptions of OLS: Problems of Multicollinearity, Heteroscedasticity and Autocorrelation - Nature of Problem, Causes, Consequences, Remedies (Concepts Only).

D. Concept of Dummy Variable**(07 Lectures)**

- ☐ Definition – Uses of Dummy Variables – Dummy variables for Changes in Intercept Terms – Dummy Variables for Changes in Slope Coefficients - Estimation– Dummy Variable Trap

E. Specification Problem**(08 Lectures)**

- ☐ Omission of a Relevant Variable – Inclusion of an Irrelevant Variable – Tests of Specification Errors

REFERENCES:

1. Dominick Salvatore (2001): *Schaum's Outline of Statistics and Econometrics* (McGraw-Hill).
2. Maddala: *Introduction to Econometrics* (Wiley)
3. Gujarati, N Damodar (2011): *Basic Econometrics* (McGraw-Hill).

**THIRD YEAR: SEMESTER-VI**

4. Peter Kennedy (2004): *A Guide to Econometrics* (Blackwell Publishers).
5. A. Koutsoyannis: *An Introduction to Econometrics*
6. Christopher Dougherty: *Introduction to Econometrics* (Oxford University Press, Indian Edn. 2007)

Question pattern**1. Objective types questions (of 2 marks)**

- a. In the equation $y = \beta_0 + \beta_1 X_1 + u$, what β_0 stand for? Explain with an example.
- b. Distinguish between a parameter and an estimate.
- c. Define a Dummy Variable.
- d. What are the desirable properties of an econometric model?
- e. What is meant by autocorrelation?
- f. What is Homoskedasticity?
- g. What do you mean by Multicollinearity?

2. Short answer types questions (of 5 marks)

- a. Mention few uses of Dummy variable in regression analysis.
- b. In a two-variable Classical Linear Regression Model, show that the least square estimators of the parameters are unbiased.
- c. Compute the value of coefficient of determination (R^2) in a Classical Linear Regression Model.
- d. What are the assumptions made regarding the error term in a Classical Linear Regression Model? What happens to the OLS estimator if Homoskedasticity assumption is violated?
- e. From the following data of 20 pairs of observations on X and Y estimate ' α ' and ' β '. Also write the equation of estimated regression line. $\sum X_i = 228$, $\sum Y_i = 3121$, $\sum X_i Y_i = 38927$, $\sum X_i^2 = 3204$, $\sum x_i y_i = 3347.60$, $\sum x_i^2 = 604.80$, $\sum y_i^2 = 19837$
- f. Prove that the estimated regression line $\hat{Y} = \hat{\alpha} + \hat{\beta}X$ passes through the point of the means (\bar{X} , \bar{Y}).

3. Long answer types questions (of 10 marks)

- a. A sample of 20 observations corresponding to the regression model $Y_i = \alpha + \beta X_i + U_i$ given the following data: $\sum Y = 21.9$, $\sum (Y - \bar{Y})^2 = 86.9$, $\sum (X - \bar{X})(Y - \bar{Y}) = 106.4$, $\sum X = 186.2$, $\sum (X - \bar{X})^2 = 215.4$ Estimate α , β and calculate estimates of variance of your estimates. Estimate the conditional mean value of Y corresponding to a value of X fixed at $X=10$.
- b. Describe the Durbin-Watson 'd' statistic

**THIRD YEAR: SEMESTER-VI****(UG/ECO/602/ C-14)****Core- 14: Public Economics****Credit- 06****Full Marks: 50****Classes: 60 (Lecture) + 15 (Tutorial)****Course outcome**

- To discuss about the Nature & Scope of Public Economics.
- To explain the Theory of Public Goods.
- To explain the theories of Taxation.
- To explain the theories of Public Expenditure & Public Debt.

Course Description**A. Nature & Scope of Public Economics****(10 Lectures)**

- ☐ Definition and Scope of Public Economics
- ☐ Externalities: Meaning & Types of Externality - Positive and Negative Externalities – Externality & Market Failure
- ☐ Market Failure and Government Intervention
- ☐ The Coase Theorem

B. Theory of Public Goods**(10 Lectures)**

- ☐ Concept of Public Goods– Pure Public Goods and Merit Goods - Characteristics of Pure Public Goods – Distinction between Pure Public Goods and Private Goods – Exclusion Principle – Public Goods & Free Rider Problem - Market Failure in Case of Public Goods
- ☐ Optimal Provision of Public Goods - Lindhal Equilibrium.

C. Taxation**(20 Lectures)**

- ☐ Definition of Taxes & Cansons of Taxation
- ☐ Classification of Taxes: Direct and Indirect Taxes – Proportional, Progressive and Regressive Taxation - Merits & Demerits
- ☐ Principles of Taxation: Benefit Principle – Equal Sacrifice Principle –Ability to Pay Principle
- ☐ Burden of Taxes: Impact, Shifting and Incidence of Taxes
- ☐ Effects of Taxes: Effects of Taxation on Income Distribution, Work Efforts and on Savings – The Laffer Curve - Optimal Taxation

D. Public Expenditure & Public Debt**(20 Lectures)**

- ☐ Public Expenditure: Meaning & Classification of Public Expenditure - Government Budget & its Types – Government Expenditure & Tax Multipliers – Balanced Budget Multiplier
- ☐ Public Debt: Meaning of Public Debt – Purposes of Public Debt - Sources of Public Borrowings: Internal and External Public Debt – Effects and Burden of Public Debt.
- ☐ Fiscal Federalism in India

REFERENCES:

1. Musgrave: *Theory of Public Finance*
2. R. A. Musgrave & P. B. Musgrave: *Public finance in Theory & Practice* (McGrawHill, 5th edn. 1989)
3. J. F. Due & A. F. Friedlander: *Government Finance – Economics of Public Sector* (AITBS Publishers, 1994)
4. J. E. Stiglitz: *Economics of Public Sector* (W.W. Norton & Company, 3rd Edn. 2000)
5. Amaresh Bagchi (Ed.): *Readings in Public Finance* (OUP)
6. A. Ghosh & C. Ghosh: *Public Finance* (Prentice-Hall India, 2nd Edn. 2014)
7. Subrata Ganguly - *Public Finance*



THIRD YEAR: SEMESTER-VI

8. H.L.Bhatia: *Public Finance, Ltest Edition*

Question pattern

1. Objective type question (of 2 marks)

- a) What is merit good?
- b) State Coase Theorem.
- c) State an example each for positive externality and negative externality.
- d) Give two examples of capital expenditure of the government.
- e) What is balanced budget multiplier?
- f) What is budget?
- g) State two merits of progressive taxation.
- h) Define regressive tax.

2. Short answer type question (of 5 marks)

- a) Write a short note on – ‘Market failure and Government Intervention’.
- b) Describe the free rider problem.
- c) What is optimal tax? How can one determine the rate of optimal tax? (
- d) Write down the differences between direct tax and indirect tax.
- e) Write a short note on fiscal federalism.
- f) Discuss about the impact and incidence of sales tax as imposed upon the sellers who are facing perfectly elastic supply of the commodity.

3. Long answer type question (of 10 marks)

- a) Determine Lindhal’s equilibrium in the context of provisioning of public good.
- b) What do you mean by public debt? Write down the sources of internal and external debt for the government.



(UG/ECO/603/DSE-3) DSE-3: One Course to be Chosen from the Following Two:

dSE-3.1: POLITICAL ECONOMY

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Course outcome

- To discuss about the Characteristics of Classical Political Economy.
- To discuss about the Social Change in Historical Perspective.
- To explore the Classical Theory of Value.
- To explore Surplus Value and Capitalism.
- To discuss about the Capitalism & Accumulation of Capital and Theory of Capitalist Crisis.

Course Description

A. Characteristics of Classical Political Economy (10 Lectures)

- Who are the Classical Economists - Basic Classical Questions - Chief Features of the Classical System – Adam Smith's Growth Theory – The Ricardian One Sector Model - Classical Political Economy and Marx.

B. Social Change in Historical Perspective (10 Lectures)

- The Theory of Historical Materialism
- Marxian Theory of Stages of Growth – The Transition From Feudalism to Capitalism – Capitalism as a Historical Process
- Emergence of Socialism

C. Classical Theory of Value (15 Lectures)

- Adam Smith's Labour Theory of Value
- Ricardo's Statement of The Labour Theory of Value
- Marx's Analysis of Value: Commodity Production - Use Value & Exchange Value - Qualitative and Quantitative Aspects of Value – Commodity Fetishism - Labour & Value – Labour & Labour Power - Abstract & Concrete Labour – The Quantitative Value Problem & Concept of Socially Necessary Labour – Criticism of the Marxian Labour Theory of Value

D. Surplus Value and Capitalism (10 Lectures)

- Simple Commodity Production & Capitalist Commodity Production – The Origin of Surplus Value
- Components of Value: Constant Capital, Variable Capital and Surplus Value – The Rate of Surplus Value
- Organic Composition of Capital – The Rate of Profit
- The Law of Falling Tendency of The Rate of Profit -- Counteracting Forces.& Criticism
- Circuits of Capital.

E. Capitalism & Accumulation of Capital (08 Lectures)

- Reproduction Schemes: Simple & Extended Reproduction
- Accumulation & Industrial Reserve Army of labour
- Accumulation and Technological change.

F. Theory of Capitalist Crisis (07 Lectures)

- The Nature of Capitalist Crisis
- Crisis associated with the Falling Rate of Profit
- Realisation Crisis: Disproportionality Crisis – Under-consumption Theory of Crisis

REFERENCES



1. P. Sweezy: *Theory of Capitalist Development* (KP Bagchi & Co. 1991)
2. A. K. Dasgupta: *Epochs of Economic Theory* (Oxford University Press)
3. Marc Blaug: *Economic Theory in Retrospect* (CUP, 1978).
4. Ben Fine: *Marx's capital* (Macmillan)
5. M. Desai: *Marxian Economics* (Basil Blackwell)
6. E. Mandel: *Marxist Economic Theory* (Merlin Press)
7. T. Bottomore: *A Dictionary of Marxist Thought* (OUP, Indian Edition, Maya Blackwell)
8. P.N. Junankar: *Marx's Economics* (Heritage Publishers)

Question pattern

1. Objective type question (of 2 marks)

- a) What are the main factors of production in classical economics?
- b) What are the sources of Reserve Army of Labour?
- c) What does realization crisis mean?
- d) Distinguish between labor and labor power.
- e) What is the rate of surplus value?
- f) Define organic composition capital?
- g) Mention main stages of economic growth In the Marxian concept.
- h) What is stationary state?

2. Short answer type question (of 5 marks)

- a) Write notes on Commodity Fetishism.
- b) Briefly explain the origin of surplus value.
- c) Discuss the Adam Smith's model of growth.
- d) Explain the Marx's law of the falling tendency of profit.
- e) Write a note on capital accumulation in Marxian economics.
- f) What are the characteristic features of capitalism?

3. Long answer type question (of 10 marks)

- a) Explain the chief features of the classical economic system.
- b) Distinguish between the simple reproduction scheme and expanded reproduction scheme.

**dSE-3.2: ENVIRONMENTAL ECONOMICS****Credit- 06****Full Marks: 50****Classes: 60 (Lecture) + 15 (Tutorial)****Course Objective**

This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions viewed as externalities and their management through various economic institutions, economic incentives and other instruments and policies. Methods for analysing economic implications of environmental policy are also addressed as well as the valuation of environmental quality, assessment of environmental damages, and tools needed for the evaluation of projects such as cost-benefit analysis, and environmental impact assessments. Selected topics on international environmental issues are also discussed.

Course Learning Outcomes

The module aims to introduce students to the main theoretical and empirical concepts in environmental economics, equip students with a thorough analytical grasp of environmental policy theory, ranging from externalities to international environmental agreements, and familiarise students with the main issues in environmental valuation and with the basic features of the environmental policy tools. At the end of the module the students should be able to demonstrate their understanding of the economic concepts of environmental policy. In some models, the student will be required to deal with simple algebra problems that will help them to better understand these concepts, use diagrammatic analysis to demonstrate and compare the economic welfare effects of various environmental policy options, demonstrate their understanding of the usefulness and problems related to environmental valuation, and demonstrate their critical understanding of environmental policies.

Course Description**A. Introduction (06 Lectures)**

- ☐ Subject Matter of Environmental Economics – The Environment-Economy Interaction – Key Environmental Issues and Problems – Economic Way of Thinking about These Problems

B. Theory of Externalities & Market Failure (14 Lectures)

- ☐ Definition of Market Failure & Externalities – Positive & Negative Externalities - Pareto Optimality and Market Failure in the Presence of Externalities – Pollution as externality – Optimal Level of Pollution.
- ☐ Externalities and Property Rights - The Coase Theorem.
- ☐ Common Property Resources & The Tragedy of Commons
- ☐ Public Goods & Free Rider Problem

C. Design and Implementation of Environmental Policy (12 Lectures)

- ☐ Overview: Determination of the Socially Efficient Level of Emission - Optimum Pollution
- ☐ Types of Pollution Control Policy: Direct Regulation or Command-and-Control Policies – Polluters Pay Principle (PPP)
- ☐ Emissions/Pollution Standard
- ☐ Pigovian Taxes
- ☐ Emissions/Effluent Fee



☐ Standards Versus Fees and Taxes Versus Standards - Inefficiency of Standard-Setting

☐ Tradable Emissions/Pollution Permits – Advantages & Disadvantages

D. Environmental Valuation (12 Lectures)

☐ Meaning of Environmental Valuation – Valuation of Non-market Goods & Services – Use of Economic Value, Costs, Benefits, Willingness To Pay (WTP) & Willingness To Accept (WTA), Total Economic Value, Option Value, and Existence Value.

☐ Brief Discussion of Alternative Methods of Valuation

☐ Cost-Benefit Analysis of Environmental Policies & Regulations

E. International Environmental Problems (08 Lectures)

☐ Trans-Boundary Environmental Problems

☐ Global Warming

☐ Rain Forest Destruction

☐ Economics of Climate Change.

☐ North-South Divide

F. Environment & Sustainable Development (08 Lectures)

☐ An Overview of Economic Development & Environmental Change – Possibility of Environmental Degradation

☐ Concepts of Sustainable Development & Environmental Accounting - Objectives of Sustainable Development - Environmental Protection & Sustainable Development

☐ Population-Resource-Environment Interlinkage

☐ Poverty & Environment

☐ Growth Versus Environment – The Environmental Kuznets Curve

☐ Rural Development & the Environment – Urban Development & The Environment

☐ Sustainable Development from Indian Perspectives.

REFERENCES

1. Charles Kolstad: *Intermediate Environmental Economics* (Oxford University Press, 2nd edn. 2010).
2. Pearce & Turner: *Economics of Natural Resources & The Environment*
3. Hanley Shogren & B. White: *Environmental Economics* (CUP, 1999)
4. Tietenberg: *Environmental Economics*
5. Rabindranath Bhattacharya (ed.): *Environmental Economics – An Indian Perspective* (OUP)
6. Robert S. Pindyck, Daniel L. Rubinfeld, Prem L. Mehta: *Microeconomics, Chapter 18* (7th Edn. Pearson).
7. Dominick Salvatore: *Microeconomics, Chapter 18* (Oxford)
8. Michael P. Todaro & Stephen C. Smith: *Economic Development* (Pearson, 10th Edn.)
9. Sampat Mukherjee: *Contemporary Development Economics* (New Central Book Agency)

Question pattern

1. Objective type question (of 2 marks)

- a) What are the key environmental problems that the world is facing today?
- b) What is meant by tragedy of commons? “Tragedy of commons”
- c) Define option value and existence value in Environmental Economics.
- d) Give some examples of transboundary environmental problems.
- e) What do you mean by polluters pay principle?
- f) What are the advantages of tradable permits?
- g) Define sustainable development.

2. Short answer type question (of 5 marks)



- Why do common property resources tend to be overexploited? Briefly discuss any one solution for overcoming such a problem.
- Briefly discuss the subject matter of Environmental Economics
- Explain why sustainable development is necessary.
- Explain graphically the concepts of WTP and WTA
- Briefly discuss the concept of Pigouvian tax in correcting negative externalities due to pollution.

3. Long answer type question (of 10 marks)

- What do you mean by an emissions standard and an emissions fee? Illustrate diagrammatically when fees can be preferred to standards.
- Give a brief overview of economic development and environmental change.

THIRD YEAR: SEMESTER-VI

(UG/ECO/604/DSE-4) *DSE-4: One Course to be Chosen from the Following Two:*

dSE-4.1: ISSUES IN DEVELOPMENT ECONOMICS

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Course Outcome

- To explore the Demographic Issues & Development, Gender Issues & Development.
- To explore International Trade & Development.
- To explore Opportunities & Controversies related to Foreign Capital Inflow.
- To explore Development & The Role of The State, Market & Institutions.
- To explore Globalization & Economic Development and Environment & Sustainable Development.

Course Description

A. Demographic Issues & Development (10 Lectures)

- Demographic Concepts: Birth & Death Rates, Fertility Rate, Mortality Rate, Life Expectancy at Birth, Sex Ratio, Age Structure & Dependency Burden, Youth Dependency Ratio
- Structure of the World's Population
- Effects of Population Growth on the Process of Development – The Two-Way Relation
- Theories of Population Growth: The Malthusian Theory – The Optimum Population Theory – The Theory of Demographic Transition – Relation between Economic Transition & Demographic Transition - Transition in LDCs – The Hidden Momentum of Population Growth
- Demographic Dividend or Demographic Window of Opportunity

B. Gender Issues & Development (06 Lectures)

- Aspects of Gender Inequality: Discrimination Against Women at Workplace – Evidences of Unequal Treatment within Households
- The Concept of “Missing Woman” in Developing Countries



- ☐ Gender Gap in Health & Education – Consequences of Gender Bias in Health & Education – Benefits of Educating Women
- ☐ Woman & Development – Adverse Impact of Gender Bias on Development Performance
- ☐ Women & Poverty
- ☐ Importance of Empowerment of Women

C. International Trade & Development (07 Lectures)

- ☐ Trade as Enemy, Handmaiden and Engine of Economic Growth
- ☐ Terms of Trade and Economic Development – The Prebisch-Singer Thesis
- ☐ Traditional Trade Strategies for Development: Import Substitution Vs. Export Promotion
- ☐ Trade Policy Reforms: Concept of Trade Liberalisation – Its Advantages & Disadvantages for Developing Countries

D. Foreign Capital Inflow: Opportunities & Controversies (08 Lectures)

- ☐ Various Forms of Foreign Capital Inflow
- ☐ Role of Foreign Capital in Economic Development – The Logic of the Two-Gap Model
- ☐ Foreign Aid & The Development Assistance Debate: Arguments in Favour of Foreign Aid – Difficulties Associated with Foreign Aid – Tied Aid & Untied Aid
- ☐ Foreign Direct Investment(FDI): Meaning of FDI – Role of FDI in Economic Development – Pros & Cons
- ☐ Multinational Corporations (MNCs) & FDI: Present-day Role of MNCs in Developing Countries – Multinationals and Transfer of Technology
- ☐ Private Portfolio Investment- Boon or Bane for LDCs?

E. Development & The Role of The State, Market & Institutions (10 Lectures)

- ☐ The Role of The State: Arguments for State Intervention in LDCs
- ☐ Development Planning: The Nature of & Rationale for Development Planning in Mixed Developing Economies
- ☐ The Crisis in Planning: Problems of Plan Implementation & Plan Failure – Reasons Thereof
- ☐ Government Failures and The Resurgent Preference for Markets over Planning – Role & Limitations of the Market in LDCs
- ☐ Development & Problem of Corruption: Meaning of Corruption – Importance of Elimination of Corruption for Economic Development – Governance Reform & Tackling the Problem of Corruption
- ☐ Decentralization, Development Participation and Role of NGOs, Self Help Groups, Women Agencies & Institutions of Micro Finance

F. Globalization & Economic Development (12 Lectures)

- ☐ Globalization: Meaning & Dimensions – Conditions/ Essentials For Globalization - Implications & Impact of Globalization – Benefits & Opportunities, Costs & Risks for LDCs – Issue of International Migration & Brain Drain in the Globalization Perspective
- ☐ GATT & WTO: Objectives of GATT – Main Resolutions of The Uruguay Round – From GATT to WTO – Major Differences between GATT & WTO – Functions & Principles of WTO – The WTO Agreements – WTO Agreements & Developing Countries
- ☐ Globalization - The Indian Case: Obstacles to Globalisation – Favourable Factors – A Brief Review of Globalisation and its Impact on India

G. Environment & Sustainable Development (07 Lectures)

- ☐ An Overview of Economic Development & Environmental Change – Scope of Environmental Degradation
- ☐ Concepts of Sustainable Development & Environmental Accounting



- ☐ Common-pool (or Common Property) Resources and The Tragedy of the Commons
- ☐ Poverty & Environment
- ☐ Growth Versus Environment – The Environmental Kuznets Curve
- ☐ Rural Development & The Environment – Urban Development & The Environment
- ☐ Environmental Issues & The North-South Divide

REFERENCES

1. Michael P. Todaro & Stephen C. Smith: *Economic Development* (Pearson, 10th Edn.)
2. Debraj Ray: *Development Economics* (Oxford University Press, 2009)
3. A. P. Thirlwall: *Growth & Development* (Lynne Rienner Publishers)
4. Gerald M. Meier & James E. Rauch: *Leading Issues in Development* (Oxford University Press)
5. Sampat Mukherjee: *Contemporary Development Economics* (New Central Book agency)
6. Subrata Ghatak : *Development Economics* (Routledge, 4th Edn, 2012)
7. Pearce & Turner: *Economics of Natural Resources & The Environment*
8. Abhijit V. Banerjee & Esther Duflo: *Poor Economics-Rethinking Poverty & The ways to End It* (Random India)
9. Sunanda Sen: *Globalisation and Development* (National Book Trust, 2007)
10. J.G. Stiglitz: *Globalisation and its Discontents* (Penguin)
11. Soumyen Sikdar: *Contemporary Issues in Globalisation, An Introduction to Theory and Policy in India.* (Oxford University Press)
12. D. Nayyar: *Governing Globalisation, Issues and Institutions* (Oxford University Press)
13. Misra and Puri: *Indian Economy* (Himalaya Publishing House, Latest Edition)

Question pattern

1. Objective type question (of 2 marks)

- a) What is meant by Youth Dependency Ratio?
- b) Distinguish between Tied Aid and Untied Aid.
- c) What is meant by Dependency Burden?
- d) What is meant by 'Environmental Accounting'?
- e) What is 'Brain Drain'?
- f) State two functions of WTO.

2. Short answer type question (of 5 marks)

- a) Briefly discuss the Theory of Demographic Transition.
- b) Discuss the logic of 'Two gap Model' in Development Economics.
- c) What is meant by Export Promotion? Mention three arguments in favour of Export Promotion.
- d) What is meant by Sustainable Development?

3. Long answer type question (of 10 marks)

- a) What is meant by Import Substitution? Discuss the main arguments in favour of Import Substitution. Import Substitution
- b) Discuss the advantages and disadvantages of Trade Liberalisation for developing countries.

Credit- 06**dSE-4.2: pRoJECT**Full Marks: 50

Course objective: This course has been designed to impart knowledge and acquaint the student as to what project report writing is all about.

Course outcome:

1. The learners will gain knowledge about data analysis and logical reasoning interpretation and explanation.
2. It will also help the learners to analyse the data and write a project report

GENERAL GUIDELINES FOR pRoJECT

Purpose: The course is aimed at providing students the scope to develop skill for taking up independent analytical work/research project whereby they can learn how to select a real life problem, transform the problem into a research question and to apply an analytical framework based on theories and concepts studied and use quantitative tools learnt. They are supposed to come up with a conclusive answer to the research question.

Guidelines to be Followed:

1. The Project may be based on field survey or on analysis of data from a secondary data source. Accordingly, the project may address issues of local economy including issues of rural development, income inequality, unemployment, infrastructure, health & education etc. using primary data and applying simple statistical & econometric tools learnt.
Alternatively, the project work may concentrate on any national issue like, structural changes, demographic issues, regional comparisons, changes in monetary & fiscal policies, studies of the union budgets etc. using secondary data (from sources like C.S.O., Census Reports, Union Budget Documents, NSS, Economic Survey, RBI Bulletins, Handbook of Statistics etc.) and applying simple statistical & econometric tools.
2. Each of the projects will be supervised by a teacher. Number of projects to be supervised by a teacher will be decided according to the number of teachers and the number of students in the respective departments.
3. There should be around 10 classroom lectures to prepare the students for Field Survey and to train them for Report Writing. The remaining time will be used for Field Visits and Report Writing.
4. The Project Report will have to be submitted at the end of the final semester classes (Sem-VI).
5. The Project Report should be between 4000-5000 words (excluding charts, diagrams, tables etc.). Each student will prepare two copies of the Report, one for submission and the other for personal reference.
6. **Structure of the Project Report:**
 - ☐ Title Page
 - ☐ Certificate from the Supervising Teacher
 - ☐ Certificate by the Student
 - ☐ Acknowledgements
 - ☐ Contents
 - ☐ List of Tables & Graphs
 - ☐ List of Acronyms used
 - ☐ An Abstract of the project work: The abstract will constitute an upto-one-page executive summary providing a brief outline of the objective, scope of the project, the methodology used, the main



findings and results obtained and any conclusions or recommendations made.

Chapters

- ❏ Chapter –I: Introduction (Including Importance of the Study, Objectives of the Study, Methodology & Data Sources, Chapter Frame, Concepts used, Limitations & Further Scope of Research etc.)
- ❏ Chapter-II: Review of Literature
- ❏ Chapter-III: Profile of the Study Area (if any)
- ❏ Chapter-IV: Data Analysis (Core of the Report)
- ❏ Chapter-V: Summary of Findings & Conclusions
- ❏ Appendix: Questionnaire/ Schedule, Other Exhibits
- ❏ Select Bibliography

7. Evaluation will be on the basis of written Report (30 marks) and Viva Voce (20 marks). The Viva Voce will be conducted along with the End Semester Examination.
8. The board of examiners will consist of one internal and one external examiner (from some other college).
9. The marks of the written Report will be the average of marks given by the internal and external examiners.
10. However, the viva-voce will be conducted and the marks awarded by the external examiner only.



☐ ***Semester-wise Detailed Syllabus of Generic Elective (GE) Courses To Be Offered By The Department Of Economics For The Honours Students From Other Disciplines***

FIRST YEAR: SEMESTER-I

(UG/ECO/ 103/GE-1) GE-1: One Course to be Chosen from the Following Two:

gE-1.1 INTRoduCToRY MICRoECOnoMICS

Credit- 06

Full Marks: 50

Classes: 60 (Lectures) +15

Course Description

A. General Concepts

(10 Lectures)

- ☐ Definition of Economics – Problem of Scarcity & Choice – Scarcity, Choice and Opportunity Cost – Production Possibility Frontier – The Cost Benefit Approach to Decisions – Rationality and Self Interest – The Concept of Marginal Analysis – Positive & Normative Economics - Distinction between Microeconomics and Macroeconomics – Concepts of Different Microeconomic Units: Commodity, Consumer, Firm, Industry, Market – Three Fundamental Economic Questions: What to Produce and in What Quantities – How to Produce – For Whom to Produce – Economic Systems.
- ☐ Reading Graphs: Functional Relation – Graphs, Slopes & Intercepts – Average & Marginal Values.

B. Elementary Theories of Demand, Supply & Market

(14 Lectures)

- ☐ Demand Analysis: Definition of Demand – Individual & Market Demand - Determinants of Demand – Demand Schedule - Law of Demand, Demand Function and The Demand Curve - Derivation of the Market Demand Curve from Individual Demand Curves – Shifts of Demand Curves Versus Movements along a Demand Curve
- ☐ Elasticities of Demand: Price Elasticity of Demand – Definition, Calculation, Determinants and Uses –Cross Price Elasticity & Income Elasticity of Demand – Definition, Calculation and Uses – Concepts of Normal & Inferior Goods & Complements and Substitutes.
- ☐ Supply Analysis: Definition of Supply – Determinants of Supply – Law of Supply, Supply Function and the Supply Curve – Shifts of Supply Versus Movements along a Supply Curve – Market Supply – Elasticity of Supply: Definition & Uses.
- ☐ Market Equilibrium: Interaction between Market Demand & Market Supply and Determination of Equilibrium Market Price & Quantity - The Concept of Stability of Equilibrium (Walrasian Version).
- ☐ Comparative Static Analysis: Consequences of Shifts in Demand & Supply.
- ☐ Applications of Demand & Supply Analysis: Price Rationing, Price Floors, Consumer's Surplus, Producer's Surplus

C. Theory of Consumer Behaviour: Alternative Approaches

(14 Lectures)

- ☐ Marshallian Approach: Assumptions - Concept & Cardinal Measurement of Utility – Total & Marginal Utility - Law of Diminishing Marginal Utility – Consumer's Equilibrium: Law of Equi-marginal Utility – Diminishing Marginal Utility and The Law of Demand.
- ☐ Indifference Curve Approach: Concept of Ordinal Utility and Assumptions of Indifference Curve Approach – Definition & Properties of Indifference Curves - Budget Line - Consumer's Equilibrium– Comparative Statics: Price Effect, Income Effect and Substitution Effect - Price-Consumption, Income-Consumption &



Engel Curves – Classification of Commodities: Normal, Inferior and Giffen Goods - Derivation of the Demand Curve.

D. Theory of Production, Cost & Revenue (18 Lectures)

- ☐ **Production:** Input-Output Relationships & The Production Function – Law of Variable Proportions – Total, Average & Marginal Product Curves – Short Run & Long Run Production – Return to Factor & Returns to Scale – Choice of Technology: Isoquants & their Properties – Iso-cost lines – Simple Derivation of the Equilibrium Cost Minimising & Output Maximising Input Combination – Expansion Path.
- ☐ **Cost:** Fixed Cost, Variable Cost & Sunk Costs – Total, Average and Marginal Cost Curves in the Short Run and Long Run – Derivations, Shapes & Relations.
- ☐ **Revenue:** Concepts of Total Revenue (TR), Average Revenue (AR) & Marginal Revenue (MR) – Relation between TR, AR & MR Curves – Relation between AR, MR & Elasticity of Demand
- ☐ MC, MR & Equilibrium of the Firm – Profit Maximisation.

E. Market Morphology (04 Lectures)

- ☐ Classification of Markets - Different Criteria for Classification of Markets: Nature of Product, Number of Buyers & Sellers, Control Over Price, Conditions of Entry & Exit - Perfect Competition, Monopoly, Monopsony, Monopolistic Competition, Duopoly and Oligopoly (Definitions, Examples & Discussion of Basic Features Only).

REFERENCES

1. Samuelson & Nordhaus: *Economics* (Mc-GrawHill)
2. N. Gregory Mankiw: *Economics- Principles & Applications* (Cengage Learning India Pvt. Ltd., 2007)
3. Karl E. Case & Ray C. Fair: *Principles of Economics* (Pearson Education, 8th Edn.2007)
4. Joseph E, Stiglitz & Carl E. Walsh: *Economics* (W. W. Norton & Company, 2007)
5. Lipsey & Chrystal: *Economics* (Oxford University Press)
6. জয়দেব সরখল: অর্থনীতির নীতি ও তত্ত্ব (বকসিফিকট)
7. সত্যেন্দ্র নাথ জৈ ও দেব শর্মা: অর্থনীতি: সমকালীন অর্থনীতি (নউসিফিকট)
8. অর্থনীতি: অর্থনীতি (ffff)

gE-1.2 ECONOMIC HISTORY OF INDIA (1857-1947)

Credit- 06

Full Marks: 50

Classes: 60 (Lectures) +15

Course Description

A. Introduction (02 Lectures)

- ☐ India's Colonial Background – Overview of the Colonial Economy

B. Macro Trends (05 Lectures)

- ☐ National Income – Population - Occupational Structure.

C. Agriculture (15 Lectures)

- ☐ Agrarian Structure and Land Relations – A Brief Review of Land Settlements - Major Tenancy Reforms & their Implications
- ☐ Commercialisation of Agriculture- Causes & Effects
- ☐ Famines & Famine Relief in India – Frequency, Nature and Causes of Famines.

**D. Development of Railways and Irrigation****(08 Lectures)**

- ☐ Causes & Economic Effects of Development of Railways – Development of Irrigation System -Railway Vs Irrigation Debate

E. Deindustrialization & Growth of Modern Industries**(15 Lectures)**

- ☐ Meaning, Causes & Consequences of Deindustrialization - The Deindustrialization Debate
- ☐ Process of Industrial Transition in India - Evolution of Entrepreneurial and Industrial Structure - Nature of Industrialisation in the Interwar Period - Constraints to Industrial Breakthrough.

F. Economy and State in the Imperial Context**(15 Lectures)**

- ☐ The Imperial Priorities and The Indian Economy: Forms & Consequences of Colonial Exploitation – Exploitation through International Trade and Capital Flows – Government and Fiscal policy – Theory of Economic Drain.

REFERENCES

1. R.C. Dutt: *Economic History of India (Vols. I & II)*
2. Dhiresh Bhattacharya: *A Concise Economic History of India*
3. V. B. Singh: *Indian Economic History*
4. Tirthankar Roy: *The Economic History of India 1857-1947* (Oxford University Press, 3rd edition)
5. বইন চর্চা: ভারতের সাম্রাজ্যবাদ অর্থনীতির কল্পনা
ইতিহাস (পটভূমি এবং জটিলতা)
6. সর্বসম্মত ভাষায়: উপনিষদ শব্দভাণ্ডার
অর্থনীতি (অর্থনীতি এবং শব্দভাণ্ডার)

First Year: SEMESTER-II		
(UG/ECO/ 203/GE-2) <i>GE-2: One Course to be Chosen from the Following Two:</i>		
GE-2.1 Introductory Macroeconomics		
<u>Credit- 06</u> <u>(Tutorial)</u>	<u>Full Marks: 50</u>	<u>Classes: 60 (Lecture) + 15</u>
A. Introduction (05 Lectures)		
<ul style="list-style-type: none"> • Definition, Nature & Scope of Macroeconomics – Major Macroeconomic Issues – Basic Ideas of Classical & Keynesian Macroeconomics • Some Basic Concepts: Economic Models – Endogenous & Exogenous Variables – Stocks & Flows – Real & Nominal Variables – Equation & Identity - Ex-Ante & Ex-Post Values. 		
B. Circular Flow &National Income Accounting (10 Lectures)		
<ul style="list-style-type: none"> • Circular Flow of Income: Circular Flow of Income in a Closed Economy Without Government Activities & With Government Activities - Circular Flow of Income in an Open Economy – Withdrawal & Injections. • Definitions, Concepts & Measurement of National Income: GDP, GNP, NDP, NNP At Market Price & Factor Cost - Concepts of Disposable Income, Personal Income, Per-capita Income. • Three Methods of National Income Accounting – Output, Income and Expenditure Methods. • Real & Nominal GDP ---the Concept of GDP Deflator and Price Indices • The Accounting Identity Between Saving & Investment • Problems of using National Income and Per-capita Income as a Measure of Economic Welfare. 		
C. Simple Keynesian Model of Income Determination (12 Lectures)		
<ul style="list-style-type: none"> • Keynesian Consumption Function & its Properties – Concepts of APC & MPC - Factors Affecting Consumption Expenditure --- Saving Function & its Properties – Concepts of APS & MPS – Relationships among APC, MPC, APS & MPS • Determination of Equilibrium Level of National Income – Nature & Stability of Equilibrium • Comparative Static Analysis: The Simple Keynesian Multiplier Analysis – Investment Multiplier - Limitations of the Multiplier Analysis. • The Paradox of Thrift. 		
D. Theory of Investment (05 Lectures)		

- Concept of Investment – Autonomous & Induced Investment – Gross Investment & Net Investment
- Marginal Efficiency of Capital (MEC) and Keynesian Analysis of Investment.
- The Simple Acceleration Theory of Investment - Statement, Assumptions, Implications & Limitations
(Without Rigorous Mathematical Derivations)

E. Money

(05 Lectures)

- Definition & Functions of Money – Value of Money – Components of Money Supply (M_1 , M_2 , M_3 etc.)
- Quantity Theory of Money: Fisher's Version and Cambridge Version – Comparison & Criticisms.
- Demand for Money: Transactions, Precautionary & Speculative Demand for Money – The Liquidity Preference Theory.

F. Classical Theory of Employment **Lectures)**

(04

- Classical Theory of Employment and Output – Say's Law of Markets – Concept of Full Employment.

G. Theory of Inflation **Lectures)**

(15

- Concepts of Inflation, Deflation & Stagflation – Types & Causes of inflation
- Inflationary Gap Analysis & its Limitations
- Distinction between Demand-pull and Cost-push Inflation
- Inflation & Unemployment: Types of Unemployment & their Characteristics – Inflation-Unemployment Trade-off: Basic Concept of Phillips Curve.
- Effects of Inflation
- Anti-Inflationary Policies

REFERENCES

1. Samuelson & Nordhaus: *Economics* (Mc-GrawHill)
2. Soumyen Sikdar: *Principles of Macroeconomics* (Oxford University Press)
3. N. Gregory Mankiw: *Principles of Macroeconomics* (Indian reprint by Thompson South-Western., 2007)
4. Karl E. Case & Ray C. Fair: *Principles of Economics* (Pearson Education, 8th Edn.2007)
5. Joseph E, Stiglitz & Carl E. Walsh: *Economics* (W. W. Norton & Company, 2007)
6. Lipsey & Chrystal: *Economics* (Oxford University Press)
7. জয়দেব সরদার: অর্থনীতির ভিত্তি - অর্থনীতি (বঙ্গবন্ধু নসিমা বিশ্ববিদ্যালয়)
8. সত্যজিৎ মজুমদার ও সত্যজিৎ শর্ম্মা: সমকালীন অর্থনীতি (বনউ দসগুপ্ত রীতিমত)
9. হুবাইর আলী: অর্থনীতি: অর্থনীতির ভিত্তি (বঙ্গবন্ধু বিশ্ববিদ্যালয়)



gE-2.2 MoNEY & BANKING

Credit- 06

Full Marks: 50

Classes: 60 (Lectures) +15 (Tutorials)

Course Description**A. Money****(06 Lectures)**

- ☐ Definition of Money – Kinds of Money: Fiduciary/ Debt/ Credit Money – Coins, Paper Currency & Deposit Money - Legal Tender or Fiat Money and Non-legal Tender or Credit Money Proper - Limited & Unlimited Legal Tender – e-Money & Plastic Money – Functions of Money – Money Vs. Near Money – Examples of Near Money - Value of Money – High-powered Money or Monetary Base - Measures of Money Supply.

B. Overview of The Financial System**(08 Lectures)**

- ☐ Meaning & the Role/Functions of the Financial System - Constituents of the Financial System: Financial Assets/ Instruments; Financial Intermediaries/ Institutions; and Financial Markets
- ☐ Definition & Role of Financial Markets – Classification of Financial Markets: Money Market & Capital Market – Basic Distinction between Money Market & Capital Market
- ☐ Definition & Role of Financial Intermediaries – Classification of Financial Intermediaries: Banks and Non-Bank Financial Institutions (NBFIs)
- ☐ Financial Assets/Instruments: Distinction between Primary & Secondary Securities – Debt & Equity Instruments of Various Types – Bonds, Shares, Debentures etc.

C. Money Market**(06 Lectures)**

- ☐ Features, Importance & Functions of the Money Market - Characteristics of Developed and Underdeveloped Money Markets
- ☐ Components of Money Market: Call Money Market - Commercial Bill Market - Treasury Bill Market – Repo & Reverse Repo Markets.

D. Capital Market**(14 Lectures)**

- ☐ Features, Importance & Functions of the Capital Market - Characteristics of Developed and Underdeveloped Capital Markets
- ☐ Components of Capital Market: Gilt-edged Market and the Industrial Securities Market – Distinction between Primary Market and Secondary Market
- ☐ Features, Role & Functions of Stock Market or Stock Exchange

E. Banks: Commercial Banks & The Central Bank**(16 Lectures)**

- ☐ Definition & Functions of Commercial Banks – Concepts of Primary & Derivative Deposits and the Process of Credit Creation by Commercial Banks – Role of Commercial Banks in Economic Development.
- ☐ Definition & Functions of Central Bank – Distinction between Central Bank & Commercial Banks – Central Bank & Monetary Policy: Definition, Goals, Targets, Indicators & Instruments of Monetary Policy – Various Types of Quantitative & Qualitative Instruments of Credit Control.

F. Non-Bank Financial Intermediaries**(05 Lectures)**

- ☐ Distinction Between Commercial Banks & NBFIs – Validity of the Distinction - Examples of NBFIs – Development Banks, Mutual Funds, Insurance Companies - Central Bank's Control Over NBFIs.

**G. Financial Markets and Interest Rates Behaviour****(05 Lectures)**

- ▣ Gross & Net Interest - Real & Nominal Interest Rates – Sources of Interest Rate Differentials – Meaning of Term Structure of Interest Rates - Theories of Term Structure of Interest Rates: The Expectations Theory – The Liquidity or Risk Premium Theory – The Market Segmentation Theory

REFERENCES

1. Suraj B. Gupta: *Monetary Economics- Institutions, Theory & Policy* (S.Chand & Co)
2. S. Gursami: *Indian Financial System* (Tata McGraw Hill)
3. L. M. Bhole: *Financial Institutions and Markets* (Tata McGraw Hill).
4. R. R. Paul: *Monetary Economics* (Kalyani Publishers)
5. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions* (Pearson Education)
6. F. J. Fabozzi, F. Modigliani, F. J. Jones & M. G. Ferri: *Foundations of Financial Markets and Institutions* (Pearson Education).
7. M. Y. Khan: *Indian Financial System* (Tata McGraw Hill).

SECoNd YEAR: SEMESTER-III
(UG/ECO/ 304/GE-3) GE-3: One Course to be Chosen from the Following Two:
gE-3.1 INdIAN ECoNoMY-I

Credit- 06

Full Marks: 50

Classes: 60 (Lectures) +15 (Tutorials)

Course Description**A. India as a Developing Economy****(04 Lectures)**

- ▣ Salient Features of the Indian Economy as a Developing Economy – Causes of Underdevelopment of the Indian Economy.

B. National Income & Occupation Structure**(08 Lectures)**

- ▣ Methods of National Income Estimation in India – Problems of Estimation
- ▣ Growth & Trends in National and Per Capita Income in India in the Post-independence Period
- ▣ Sectoral Distribution of National Income and its Change over Time
- ▣ Changes in Occupation Structure in India over Time.

C. Population**(08 Lectures)**

- ▣ Study of Trends in Demographic Features in India from Different Census Data: Size & Growth Rate of Population – Density of Population - Birth & Death Rates – Infant Mortality Rate – Sex Ratio – Life Expectancy at Birth –Literacy Rates – Age Composition – Rural-Urban Distribution of Population & the Degree of Urbanisation Over Time.
- ▣ Three Stage Theory of Demographic Transition in the Indian context.
- ▣ Demographic Dividend and the Window of Opportunity
- ▣ Population Policy

D. Poverty & Unemployment**(10 Lectures)**

- ▣ Problem of Poverty in India – Concept, Measurement and Extent of Poverty – Social Dimensions of Poverty - Major Poverty Alleviation Programmes and their Evaluation.



- Problem of Unemployment in India – Different Types of Unemployment – Extent of Unemployment – Assessment of the Employment Policy of the Govt. Of India.

E. Agricultural Sector in India (18 Lectures)

- Production & Productivity: Trends in Agricultural Production & Productivity in India – Causes of Low Productivity – Farm Size & Productivity Debate
- Land Reforms: Meaning, Importance, Objectives & Salient Features - Evaluation of the Land Reform Measures.
- Green Revolution: Meaning and Features – Impact of Green Revolution on Agricultural Production & Productivity, Distribution of Income and on Regional Distribution – Causes of Uneven & Limited Spread.
- Rural Credit & Capital Formation in Agricultural Sector: The Problem of Rural Indebtedness and Need for Rural Credit – Different Sources of Short-term & Long-term Credit – Role of Cooperatives, Commercial Banks & Regional Rural Banks – Rural Credit & the Role of NABARD - Microfinance.
- Agricultural Marketing: Problems / Defects of Agricultural Marketing in India – Role of Co-operatives in Agricultural Marketing – Warehousing Facilities in India – Reforms in Agricultural Marketing with Special Reference to APMC Act.
- Globalisation and Indian Agriculture.

F. Industrial Development (12 Lectures)

- Industrial Production & Patterns: Trends in Industrial Production and Changes in Industrial Pattern during the Plans
- Effects of Globalisation on Indian Industry.
- Change in Industrial Policy Over Time
- Small Scale & Cottage Industries: Definition of Cottage and Small Scale Industrial Units – Role, Performance & Problems of Small-Scale and Cottage Industries in Indian Economy – Government Policy in Respect of Small-Scale and Cottage Industries.

REFERENCES

- Datt and Sundharam: *Indian Economy* (S. Chand, Latest Edition)
- Mishra and Puri: *Indian Economy* (Himalaya Publishing House, Latest Edition)
- Uma Kapila: *Indian Economy – Issues in Development & Planning and Sectoral Aspects* (Academic Foundation, 19th Edn.)
- Joshi & Little: *India's Economic Reforms 1991-2001* (OUP)
- Bimal Jalan (Ed.): *The Indian Economy* (OUP)
- দেবশ মজুমদার: সমকালীন ভারতীয় অর্থনীতি (নউসেচল বকএজএ)
- বসন্ত ও চবিত্তা: ভারতের অর্থনীতির পরিচয় (বদ7দয় লইর)

Credit- 06

gE-3.2 puBlic FINANCE

Full Marks: 50

Classes: 60 (Lectures) +15 (Tutorials)

Course Description

A. Introduction to Public Finance (06 Lectures)

- Definition and Scope of Public Finance
- Types of Fiscal Functions – Allocation Function, Distribution Function and Stabilization Function – Fiscal Functions in a Developing Economy

**B. Public Goods , Externalities & Market Failure****(10 Lectures)**

- ☐ Overview of Public Goods: Concept of Public Goods – Characteristics of Public Goods – Distinction between Public Goods and Private Goods – Exclusion Principle & its Non-applicability in case of Public Goods
- ☐ Externalities: Types of Externality - Positive and Negative Externalities - Concept of Market Failure - Market Failure in case of Public Goods

C. Theory of Taxation**(18 Lectures)**

- ☐ Definition of Taxes & Canners of Taxation
- ☐ Classification of Taxes: Direct and Indirect Taxes – Proportional, Progressive and Regressive Taxation
- ☐ Principles of Taxation: Benefit Principle – Equal Sacrifice Principle –Ability to Pay Principle
- ☐ Burden of Taxes: Impact, Shifting and Incidence of Taxes
- ☐ Effects of Taxes: Effects of Taxation on Income Distribution, Work Efforts and on Savings

D. Public Debt**(06 Lectures)**

- ☐ Meaning of Public Debt – Purposes of Public Debt - Sources of Public Borrowings: Internal and External Public Debt – Effects and Burden of Public Debt.

E. Indian Public Finance**(20 Lectures)**

- ☐ Objectives of Fiscal Policy – Budget & its Types - Components of Govt. Revenue & Expenditure - Components of Govt. Budgets – Different Forms of Budget Deficits
- ☐ Fiscal Federalism in India – Centre-State Financial Relation
- ☐ Current Issues in India's Tax System – Tax Reforms Since 1991

REFERENCESS

1. Musgrave: *Theory of Public Finance*
2. R. A. Musgrave & P. B. Musgrave: *Public finance in Theory & Practice* (McGrawHill, 5th edn. 1989)
3. J. E. Stiglitz: *Economics of Public Sector* (W.W. Norton & Company, 3rd Edn. 2000)
4. Amaresh Bagchi (Ed.): *Readings in Public Finance* (OUP)
5. A. Ghosh & C. Ghosh: *Public Finance* (Prentice-Hall India, 2nd Edn. 2014)
6. Subrata Ganguly - *Public Finance*
7. H.L.Bhatia: *Public Finance, Ltest Edition*
8. Datt and Sundharam: *Indian Economy* (S. Chand, Latest Edition)
9. Misra and Puri: *Indian Economy* (Himalaya Publishing House, Latest Edition)

SECoNd YEAR: SEMESTER-IV**(UG/ECO/ 404/GE-4) GE-4: One Course to be Chosen from the Following Two:****gE-4.1 INdIAN ECoNoMY-II**Credit- 06Full Marks: 50Classes: 60 (Lectures) +15 (Tutorials)Course Description**A. Indian Planning Experience****(15 Lectures)**

- ☐ Definition of Economic Planning – The Rationale for Planning in a Mixed Developing Economy like India – Planning Vs Market – Concept of Decentralised Planning



- ❑ Planning Authority in India: National Development Council – Planning Commission – NITI Aayog – Reasons & Objectives behind formation of Niti Aayog
- ❑ Broad Objectives of Planning in India: Evolution of India's Development Goals & Strategies – Pre -1991 & Post-1991 Plans
- ❑ Overall Achievements & Failures of India's Five Year Plans

B. Public Sector in India (05 Lectures)

- ❑ Public Sector: Meaning, Role, Performance & Problems of Public Sector Enterprises in India – Privatisation & Disinvestment Policy – Exit Policy.

C. Money, Banking & Monetary Policy (15 Lectures)

- ❑ Concepts of Money Supply in India (M_1 , M_2 etc.)
- ❑ The Role of Commercial Banks in India – Nationalisation of Banks – Banking Sector Reforms – Causes & Consequences
- ❑ Features of Money and Capital Markets in India
- ❑ Reserve Bank of India and Monetary Policy.

D. Indian Public Finance (15 Lectures)

- ❑ Sources of Revenue of Central and State Governments – Direct & Indirect Taxes – Major Heads of Expenditures – Plan vs. Non-plan Expenditures
- ❑ Centre-State Financial Relations – Role of Finance Commission of India
- ❑ Tax Reforms since 1991
- ❑ Components of Public Debt in India

E. India's Foreign Trade & Balance of Payments (10 Lectures)

- ❑ Importance of Foreign Trade for India – Volume & Direction of Foreign Trade in the Post-Liberalisation Period - Reforms in Foreign Trade Policy since 1991 - SEZ Policy
- ❑ Trends of India's Balance of Payments in the Post-Liberalisation Period.

REFERENCES

1. Datt and Sundharam: *Indian Economy* (S. Chand, Latest Edition)
2. Misra and Puri: *Indian Economy* (Himalaya Publishing House, Latest Edition)
3. Uma Kapila: *Indian Economy – Issues in Development & Planning and Sectoral Aspects* (Academic Foundation, 19th Edn.)
4. Joshi & Little: *India's Economic Reforms 1991-2001* (OUP)
5. Bimal Jalan (Ed.): *The Indian Economy* (OUP)
6. দেবশ মখাঙ্গী: সমকালীন ভারতীয় অর্থনীতি (নউসেটেল বুক এজেন্ট)
7. বসু ও চক্রবর্তী: ভারতীয় অর্থনীতির পঞ্চাশ বছর (বদ্য লাইব্রারী)

gE-4.2 ENVIRONMENTAL ECONOMICS

Credit- 06

Full Marks: 50

Classes: 60 (Lectures) +15 (Tutorials)

Course Description

A. Introduction (06 Lectures)

- ❑ Subject Matter of Environmental Economics – The Environment-Economy Interaction – Key Environmental Issues and Problems – Economic Way of Thinking about These Problems

**B. Theory of Externalities & Market Failure****(14 Lectures)**

- ☐ Definition of Market Failure & Externalities – Positive & Negative Externalities - Pareto Optimality and Market Failure in the Presence of Externalities – Pollution as externality – Optimal Level of Pollution.
- ☐ Externalities and Property Rights - The Coase Theorem.
- ☐ Common Property Resources & The Tragedy of Commons
- ☐ Public Goods & Free Rider Problem

C. Design and Implementation of Environmental Policy**(12 Lectures)**

- ☐ Overview: Determination of the Socially Efficient Level of Emission - Optimum Pollution
- ☐ Types of Pollution Control Policy: Direct Regulation or Command-and-Control Policies – Polluters Pay Principle (PPP)
- ☐ Emissions/Pollution Standard
- ☐ Pigovian Taxes
- ☐ Emissions/Effluent Fee
- ☐ Standards Versus Fees and Taxes Versus Standards - Inefficiency of Standard-Setting
- ☐ Tradable Emissions/Pollution Permits – Advantages & Disadvantages

D. Environmental Valuation**(12 Lectures)**

- ☐ Meaning of Environmental Valuation – Valuation of Non-market Goods & Services – Use of Economic Value, Costs, Benefits, Willingness To Pay (WTP) & Willingness To Accept (WTA), Total Economic Value, Option Value, and Existence Value.
- ☐ Brief Discussion of Alternative Methods of Valuation
- ☐ Cost-Benefit Analysis of Environmental Policies & Regulations

E. International Environmental Problems**(08 Lectures)**

- ☐ Trans-Boundary Environmental Problems
- ☐ Global Warming
- ☐ Rain Forest Destruction
- ☐ Economics of Climate Change.
- ☐ North-South Divide

F. Environment & Sustainable Development**(08 Lectures)**

- ☐ An Overview of Economic Development & Environmental Change – Possibility of Environmental Degradation
- ☐ Concepts of Sustainable Development & Environmental Accounting - Objectives of Sustainable Development - Environmental Protection & Sustainable Development
- ☐ Population-Resource-Environment Interlinkage
- ☐ Poverty & Environment
- ☐ Growth Versus Environment – The Environmental Kuznets Curve
- ☐ Rural Development & the Environment – Urban Development & The Environment
- ☐ Sustainable Development from Indian Perspectives.

REFERENCES

1. Charles Kolstad: *Intermediate Environmental Economics* (Oxford University Press, 2nd edn. 2010).
2. Pearce & Turner: *Economics of Natural Resources & The Environment*
3. Hanley Shogren & B. White: *Environmental Economics* (CUP, 1999)
4. Tietenberg: *Environmental Economics*
5. Rabindranath Bhattacharya (ed.): *Environmental Economics – An Indian Perspective* (OUP)



6. Robert S. Pindyck, Daniel L. Rubinfeld, PremL.Mehta: *Microeconomics, Chapter 18* (7th Edn. Pearson).
7. Dominick Salvatore: *Microeconomics, Chapter 18* (Oxford)
8. Sampat Mukherjee: *Contemporary Development Economics* (New Central Book Agency)

CBCS SYLLABUS
FOR
THREE YEARS UNDER-GRADUATE COURSE
IN
DRAFT ECONOMICS PASS
(PROGRAMME) (w.e.f. 2022)



BANKURA UNIVERSITY
BANKURA
WEST BENGAL
PIN 722155



General Information

- Syllabus has been structured following the **Choice Based Credit System (CBCS)** introduced by the University Grants Commission.
- A total no. of 24 courses/papers will be covered in six semesters spread over three years. The choice of the courses will be as follows:
 - ☐ **12 Compulsory Core Courses** – 04 courses each from three disciplines;
 - ☐ **02 Ability Enhancement Compulsory Courses (AECC)** — (i) *Environmental Studies (ENV)*, and (ii) *English/ Modern Indian Language (E/MIL)*;
 - ☐ **06 Discipline Specific Elective Courses (DSE)** -- 02 each from 03 disciplines;
 - ☐ **04 Skill Enhancement Courses (SEC)** – from 03 disciplines.
- Each paper is of 50 marks (40 marks for End Semester Examination (ESE) and 10 marks for Internal Assessment (IA)). For practical based courses 25 marks will be for theory, 15 marks for practical and 10 marks for internal assessment.

Programme Outcomes

- Economic graduates will be able to interpret the information from economic perspective. Hence will be an effective economic analysts, who could successfully complete a credential test.
- Economic graduates will be able to assess situation and identify main economic problems and demonstrate an ability to offer alternative solution to problems. This will enhance critical thinking skills.
- Graduates of economics will be able to demonstrate their proficiency and skills necessary to attract the potential employers in the field of banking sector, insurance companies, marketing field and also in the field of teaching

Programme Learning Outcomes

On successful completion of the B.Sc Program in Economics program, the students are able to

- Have the Capacity to analyse and evaluate the current events from an economic perspective.
- Expand skills in practical application of economic theory.
- Possess an ability to offer alternative solution on policy issues.
- Communicate effectively on specific economic issues and present complex information in a clear and concise manner.
- Boost the spirit of self confidence and inculcate the spirit of moral values.



☐ **Semester-wise Sequencing of Courses**

Semester	Course Title			
I	Microeconomics-I (UGP/ECO/101/C-1A)	Discipline-2 (UGP/102/C-2A)	Discipline-3 (UGP/103/C-3A)	Environmental Studies (UG/104/AECC-ENV)
II	Macroeconomics-I (UGP/ECO/201/C-1B)	Discipline-2 (UGP/202/C-2B)	Discipline-3 (UGP/203/C-3B)	English/ MIL (UG/204/AECC-E/MIL)
III	Basic Features of Indian Economy (UGP/ECO/301/C-1C)	Discipline-2 (UGP/302/C-2C)	Discipline-3 (UGP/303/C-3C)	Data Analysis (UGP/ECO/304/SEC-1)
IV	Indian Economic Planning & Policy Issues (UGP/ECO/401/C-1D)	Discipline-2 (UGP/402/C-2D)	Discipline-3 (UGP/403/C-3D)	Computer Applications in Economics (UGP/ECO/404/SEC-2)
V	Microeconomics-II OR Money & Banking OR Environmental Economics (UGP/ECO/501/DSE-1A)	Discipline-2 (UGP/502/DSE-2A)	Discipline-3 (UGP/503/DSE-3A)	Research Methodology (UGP/ECO/504/SEC-3)
VI	Macroeconomics-II OR Economic History of India(1857-1947) OR Public Finance (UGP/ECO/601/DSE-1B)	Discipline-2 (UGP/602/DSE-2B)	Discipline-3 (UGP/603/DSE-3B)	Contemporary Economic Issues (UGP/ECO/604/SEC-4)



Semester-wise Sequencing of Courses

SEMESTER – I

Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per Week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SP/ECO/101/C-1A	Microeconomics-I	6	0	10	40	50	5	1	0
SP/102/ C-2A	Discipline-2*	6	-	10	40	50	5	1	-
SP/103/ C-3A	Discipline-3*	6	-	10	40	50	5	1	-
ACSHP/104/ AECC-1	Environmental Studies	4	0	10	40	50	4	0	0
Total in Semester - I		22		40	160	200			

****Actual Distribution of Full Marks and Total No. of Hrs. allotted in Discipline-2 & Discipline-3 will be according as the course chosen is practical based or is without practical**

SEMESTER –II

Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per Week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SP/ECO/201/C-1B	Macroeconomics-I	6	0	10	40	50	5	1	0
SP/202/ C-2B	Discipline-2*	6	-	10	40	50	5	1	-
SP/ 203/C- 3B	Discipline-3*	6	-	10	40	50	5	1	-
ACSHP/204/ AECC-2	English/MIL	2	0	10	40	50	2	0	0
Total in Semester - II		20		40	160	200			
<u>**Actual Distribution of Full Marks and Total No. of Hrs. allotted in Discipline-2 & Discipline-3 will be according as the course chosen is practical based or is without practical</u>									

SEMESTER – III

Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per Week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SP/ECO/301/C-1C	Basic Features of Indian Economy	6	0	10	40	50	5	1	0
SP/302/C-2C	Discipline-2*	6	-	10	40	50	5	1	-
SP/ 303/ C-3C	Discipline-3*	6	-	10	40	50	5	1	-
SP/ECO/304/ SEC-1	Data Analysis	2	0	10	40	50	2	0	0
Total in Semester - III		20		40	160	200			
<u>**Actual Distribution of Full Marks and Total No. of Hrs. allotted in Discipline-2 & Discipline-3 will be according as the course chosen is practical based or is without practical</u>									

B.Sc. (Programme) Economics

SEMESTER – IV

Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per Week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SP/ECO/401/C-1D	Indian Economic Planning & Policy Issues	6	0	10	40	50	5	1	0
SP/ 402/ C-2D	Discipline-2*	6	-	10	40	50	5	1	-
SP/ 403/ C-3D	Discipline-3*	6	-	10	40	50	5	1	-
SP/ECO/404/ SEC-2	Computer Application in Economics	2	15	10	25	50	1	0	2
Total in Semester - IV		20	-	-	-	200			

****Actual Distribution of Full Marks and Total No. of Hrs. allotted in Discipline-2 & Discipline-3 will be according as the course chosen is practical based or is without practical**

SEMESTER – V

Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per Week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SP/ECO/501/DSE-1A	Any one of the following: <ul style="list-style-type: none"> • <i>Microeconomics-II</i> • <i>Money & Banking</i> • <i>Environmental Economics</i> 	6	0	10	40	50	5	1	0
SP/ 502/DSE-2A	Discipline–2*	6	-	10	40	50	5	1	-
SP/ 503/DSE-3A	Discipline–3*	6	-	10	40	50	5	1	-
SP/ECO/504/SEC-3	Research Methodology	2	-	10	40	50	2	0	0
Total in Semester – V		20		40	160	200			
<u>**Actual Distribution of Full Marks and Total No. of Hrs. allotted in Discipline-2 & Discipline-3 will be according as the course chosen is practical based or is without practical</u>									

SEMESTER – VI

Course Code	Course Title	Credit	Marks				No. of Hrs./ Classes per Week		
			Pr.	I.A.	ESE	Total	Lec.	Tu.	Pr.
SP/ECO/601/DSE-1B	Any one of the following: <ul style="list-style-type: none"> • <i>Macroeconomics-II</i> • <i>Economic History of India (1857-1947)</i> • <i>Public Finance</i> 	6	0	10	40	50	5	1	0
SP/ 602/DSE-2B	Discipline-2*	6	-	10	40	50	5	1	-
SP/ 603/DSE-3B	Discipline-3*	6	-	10	40	50	5	1	-
SP/ECO/ 604/SEC-4	Contemporary Economic Issues	2	-	10	40	50	2	0	0
Total in Semester – VI		20		40	160	200			
<u>**Actual Distribution of Full Marks and Total No. of Hrs. allotted in Discipline-2 & Discipline-3 will be according as the course chosen is practical based or is without practical</u>									
Grand Total (All Semesters)		122				1200			

SP= Science programme/Pass, ECO= Economics, ACSHP=Arts Commerce Science Honours Pass, C= Core Course, MIL= Modern Indian Language, AECC= Ability Enhancement Compulsory Course, AECC= Ability Enhancement Compulsory Course, SEC= Skill Enhancement Course, GE= Generic Elective, DSE= Discipline Specific Elective IA= Internal Assessment, ESE= End-Semester Examination, Lec.= Lecture, Tu.= Tutorial, and Pr.=Practical

BANKURA UNIVERSITY



CBCS Syllabus for Three Years Under-Graduate Course in B. Sc. Pass Programme in Economics With Effect From 2022-23 Session

FIRST YEAR: SEMESTER-I

(UGP/ECO/101/C-1A) 1.1 *Core-1A: Microeconomics -I*

Credit- 06 Full Marks: 50 Classes: 60 (Lecture) + 15 (Tutorial)

Course outcome

- Analyse the indifference curves and also understand its uses.
- Explain the Elasticity of demand and supply.
- Understand how factors of production can be used optimally to produce goods and services as they are the building blocks of the economy.
- Differentiate between short run and long run cost, interpret the relationship between short run and long run costs.

A. General Concepts

(10 Lectures)

- Definition of Economics – Problem of Scarcity & Choice – Scarcity, Choice and Opportunity Cost – Production Possibility Frontier – The Cost Benefit Approach to Decisions – Rationality and Self Interest – The Concept of Marginal Analysis – Positive & Normative Economics - Distinction between Microeconomics and Macroeconomics – Concepts of Different Microeconomic Units: Commodity, Consumer, Firm, Industry, Market – Three Fundamental Economic Questions: What to Produce and in What Quantities – How to Produce – For Whom to Produce – Economic Systems.
- Reading Graphs: Functional Relation – Graphs, Slopes & Intercepts – Average & Marginal Values.

B. Elementary Theories of Demand, Supply & Market

(14 Lectures)

- Demand Analysis: Definition of Demand – Individual & Market Demand - Determinants of Demand – Demand Schedule - Law of Demand, Demand Function and The Demand Curve - Derivation of the Market Demand Curve from Individual Demand Curves – Shifts of Demand Curves Versus Movements along a Demand Curve
- Elasticities of Demand: Price Elasticity of Demand – Definition, Calculation, Determinants and Uses –Cross Price Elasticity & Income Elasticity of Demand – Definition, Calculation and Uses – Concepts of Normal & Inferior Goods and Substitutes & Complements
- Supply Analysis: Definition of Supply – Determinants of Supply – Law of Supply, Supply Function and the Supply Curve – Shifts of Supply Versus Movements along a Supply Curve – Market Supply – Elasticity of Supply: Definition & Uses.
- Market Equilibrium: Interaction between Market Demand & Market Supply and Determination of Equilibrium Market Price & Quantity - The Concept of Stability of Equilibrium (Walrasian Version).
- Comparative Static Analysis: Consequences of Shifts in Demand & Supply.
- Applications of Demand & Supply Analysis: Price Rationing, Price Floors, Consumer's Surplus, Producer's Surplus

C. Theory of Consumer Behaviour: Alternative Approaches

(14 Lectures)

- Marshallian Approach – Assumptions - Concept & Cardinal Measurement of Utility – Total & Marginal Utility - Law of Diminishing Marginal Utility – Consumer's Equilibrium: Law of Equi-marginal Utility – Diminishing Marginal Utility and The Law of Demand.
- Indifference Curve Approach: Concept of Ordinal Utility and Assumptions of Indifference Curve Approach – Definition & Properties of Indifference Curves - Budget Line - Consumer's Equilibrium– Comparative Statics:

Price Effect, Income Effect and Substitution Effect - Price-Consumption, Income-Consumption & Engel Curves – Classification of Commodities: Normal, Inferior and Giffen Goods - Derivation of the Demand Curve.

D. Theory of Production, Cost & Revenue**(18 Lectures)**

- Production: Input-Output Relationships & The Production Function – Law of Variable Proportions – Total, Average & Marginal Product Curves – Short Run & Long Run Production – Return to Factor & Returns to Scale – Choice of Technology: Isoquants & their Properties – Iso-cost lines – Simple Derivation of the Equilibrium Cost Minimising & Output Maximising Input Combination – Expansion Path.
- Cost: Fixed Cost, Variable Cost & Sunk Costs – Total, Average and Marginal Cost Curves in the Short Run and Long Run – Derivations, Shapes & Relations.
- Revenue: Concepts of Total Revenue (TR), Average Revenue (AR) & Marginal Revenue (MR) – Relation between TR, AR & MR Curves – Relation between AR, MR & Elasticity of Demand MC, MR & Equilibrium of the Firm – Profit Maximisation.

E. Market Morphology**(04 Lectures)**

- Classification of Markets - Different Criteria for Classification of Markets: Nature of Product, Number of Buyers & Sellers, Control Over Price, Conditions of Entry & Exit - Perfect Competition, Monopoly, Monopsony, Monopolistic Competition, Duopoly and Oligopoly (Definitions, Examples & Discussion of Basic Features Only).

References

1. Samuelson & Nordhaus: *Economics* (Mc-GrawHill)
2. N. Gregory Mankiw: *Economics- Principles & Applications* (Cengage Learning India Pvt. Ltd., 2007)
3. Karl E. Case & Ray C. Fair: *Principles of Economics* (Pearson Education, 8th Edn.2007)
4. Joseph E. Stiglitz & Carl E. Walsh: *Economics* (W. W. Norton & Company, 2007)
5. Lipsey & Chrystal: *Economics* (Oxford University Press)
6. জয়দেব সরখেল : আধুনিক অর্থনীতির ভূমিকা, প্রথম খন্ড (বুক সিন্ডিকেট)
7. সম্পদ মুখার্জী ও দেবেশ মুখার্জী : সমকালীন অর্থবিদ্যা (নিউ সেন্ট্রাল বুক এজেন্সি)
8. হরিদাস আচার্য : আধুনিক অর্থনীতি (প্রতিভা পাবলিকেশন)

Sample questions**1. Objective type questions (of 2 marks)**

- a) Distinguish between Positive Economics and Normative Economics.
- b) Define Law of Supply.
- c) What is income elasticity of demand?
- d) What is income effect?
- e) State the Law of Variable Proportions.
- f) What is Average Revenue?
- g) State two features of monopoly market.
- h) What is budget line?

2. Short answer type questions (of 5 marks)

- a) What are the exceptions to law of demand?
- b) How does consumer reach equilibrium?
- c) What are the properties of isoquant?
- d) What are the three stages of production?

3. Long answer type questions (of 10 marks)

- a) What are average cost and marginal cost? What is the relationship between average cost and marginal cost?
- b) What are the factors determining elasticity of demand?

(UGP/102/C-2A)	1.2 Core-2A: Discipline-2
(UGP/103/C-3A)	1.3 Core-3A: Discipline-3
(UG/104/AECC-ENV)	1.4 AECC-ENV: Environmental Studies

FIRST YEAR: SEMESTER-II	
(UGP/ECO/201/C-1B) 2.1 Core-1B: Macroeconomics -I	
Credit- 06	Full Marks: 50
Classes: 60 (Lecture) + 15 (Tutorial)	
Course outcome <ul style="list-style-type: none"> Understanding nature of macro economics and various sectors interrelationship. Gaining knowledge on classical and Keynesian theory of employment their relevance. Preparing to understand various factors factors of consumption function. Accumulate knowledge on saving and investment function in an economy. Understanding the various theories of interest and applications. 	
A. Introduction (05 Lectures) <ul style="list-style-type: none"> Definition, Nature & Scope of Macroeconomics – Major Macroeconomic Issues – Basic Ideas of Classical & Keynesian Macroeconomics Some Basic Concepts: Economic Models – Endogenous & Exogenous Variables – Stocks & Flows – Real & Nominal Variables – Equation & Identity - Ex-Ante & Ex-Post Values. 	
B. Circular Flow & National Income Accounting (10 Lectures) <ul style="list-style-type: none"> Circular Flow of Income: Circular Flow of Income in a Closed Economy Without Government Activities & With Government Activities - Circular Flow of Income in an Open Economy – Withdrawal & Injections. Definitions, Concepts & Measurement of National Income: GDP, GNP, NDP, NNP At Market Price & Factor Cost - Concepts of Disposable Income, Personal Income, Per-capita Income. Three Methods of National Income Accounting – Output, Income and Expenditure Methods. Real & Nominal GDP ---the Concept of GDP Deflator and Price Indices The Accounting Identity Between Saving & Investment Problems of using National Income and Per-capita Income as a Measure of Economic Welfare 	
C. Simple Keynesian Model of Income Determination (12 Lectures) <ul style="list-style-type: none"> Keynesian Consumption Function & its Properties – Concepts of APC & MPC - Factors Affecting Consumption Expenditure --- Saving Function & its Properties – Concepts of APS & MPS – Relationships among APC, MPC, APS & MPS Determination of Equilibrium Level of National Income – Nature & Stability of Equilibrium Comparative Static Analysis: The Simple Keynesian Multiplier Analysis – Investment Multiplier - Limitations of the Multiplier Analysis. The Paradox of Thrift. 	
D. Theory of Investment (05 Lectures) <ul style="list-style-type: none"> Concept of Investment – Autonomous & Induced Investment – Gross Investment & Net Investment Marginal Efficiency of Capital (MEC) and Keynesian Analysis of Investment. <p>The Simple Acceleration Theory of Investment - Statement, Assumptions, Implications & Limitations (Without Rigorous Mathematical Derivations)</p>	
F. Classical Theory of Employment (04 Lectures) <p>Classical Theory of Employment and Output – Say's Law of Markets – Concept of Full Employment.</p>	
G. Theory of Inflation (15 Lectures) <ul style="list-style-type: none"> Concepts of Inflation, Deflation & Stagflation – Types & Causes of inflation 	

- Inflationary Gap Analysis & its Limitations
- Distinction between Demand-pull and Cost-push Inflation
- Inflation & Unemployment: Types of Unemployment & their Characteristics – Inflation- Unemployment Trade-off: Basic Concept of Phillips Curve.
- Effects of Inflation Anti-Inflationary Policies

References

1. Samuelson & Nordhaus: *Economics* (Mc-GrawHill)
2. Soumyen Sikdar: *Principles of Macroeconomics* (Oxford University Press)
3. N. Gregory Mankiw: *Principles of Macroeconomics* (Indian reprint by Thompson South-Western., 2007)
4. Karl E. Case & Ray C. Fair: *Principles of Economics* (Pearson Education, 8th Edn.2007)
5. Joseph E, Stiglitz & Carl E. Walsh: *Economics* (W. W. Norton & Company, 2007)
6. Lipsey & Chrystal: *Economics* (Oxford University Press)
7. জয়দেব সরখেল : আধুনিক অর্থনীতির ভূমিকা, প্রথম খন্ড (বুক সিভিকিট)
8. সম্পদ মুখার্জী ও দেবেশ মুখার্জী : সমকালীন অর্থবিদ্যা (নিউ সেন্ট্রাল বুক এজেন্সি)
9. হরিদাস আচার্য : আধুনিক অর্থনীতি (প্রতিভা পাবলিকেশন)

Sample questions

1. Objective type questions (of 2 marks)

- a) What is Marginal Propensity to Consume (MPC)?
- b) Define GDP at market price.
- c) What is meant by GDP deflator? GDP deflator
- d) Define personal disposable income.
- e) What is meant by simple Keynesian investment multiplier?
- f) What do you mean by value of money?

2. Short answer type questions (of 5 marks)

- a) Briefly discuss the census of production method of measurement of national income.
- b) Write down the problems of using national income as a measure of economic welfare.
- c) Explain the accounting identity between saving and investment.
- d) Explain the properties of Keynesian consumption function with the help of suitable diagram.
- e) Describe different functions of money

3. Long answer type questions (of 10 marks)

- a) Discuss how equilibrium level of national income is determined in the simple Keynesian model and explain whether the equilibrium is stable.
- b) Write down a detailed comparative analysis about Fisher and Cambridge version of quantity theory of money.

(UGP/202/C-2B)	2.2 Core-2B: Discipline-2
(UGP/203/C-3B)	2.3 Core-3B: Discipline-3
(UG/204/AECC-E/MIL)	2.4 AECC-E/MIL: English/MIL

SECOND YEAR: SEMESTER-III	
(UGP/ECO/301/C-1C)	3.1 Core-1C: Basic Features of Indian Economy
Credit- 06	Full Marks: 50 Classes: 60 (Lecture) + 15 (Tutorial)
Course outcome <ul style="list-style-type: none"> Understand the basic structure of Indian Economy. Analyse the reasons behind income inequality and unemployment. Comprehensively interpret the reasons for low productivity in agriculture. Explain the need of industrial planning and growth to foster Economic Development. Justify the growth rate of the economy on account of planning. 	
A. India as a Developing Economy (04 Lectures) <ul style="list-style-type: none"> Salient Features of the Indian Economy as a Developing Economy – Causes of Underdevelopment of the Indian Economy. 	
B. National Income & Occupation Structure (08 Lectures) <ul style="list-style-type: none"> Methods of National Income Estimation in India – Problems of Estimation Growth & Trends in National and Per Capita Income in India in the Post-independence Period Sectoral Distribution of National Income and its Change over Time Changes in Occupation Structure in India over Time. 	
C. Population (08 Lectures) <ul style="list-style-type: none"> Study of Trends in Demographic Features in India from Different Census Data: Size & Growth Rate of Population – Density of Population - Birth & Death Rates – Infant Mortality Rate – Sex Ratio – Life Expectancy at Birth – Literacy Rates – Age Composition – Rural-Urban Distribution of Population & the Degree of Urbanisation Over Time. Three Stage Theory of Demographic Transition in the Indian context. Demographic Dividend and the Window of Opportunity Population Policy 	
D. Poverty & Unemployment (10 Lectures) <ul style="list-style-type: none"> Problem of Poverty in India – Concept, Measurement and Extent of Poverty – Social Dimensions of Poverty - Major Poverty Alleviation Programmes and their Evaluation. Problem of Unemployment in India – Different Types of Unemployment – Extent of Unemployment – Assessment of the Employment Policy of the Govt. Of India. 	
E. Agricultural Sector in India (18 Lectures) <ul style="list-style-type: none"> <u>Production & Productivity</u>: Trends in Agricultural Production & Productivity in India – Causes of Low Productivity – Farm Size & Productivity Debate <u>Land Reforms</u>: Meaning, Importance, Objectives & Salient Features - Evaluation of the Land Reform Measures. <u>Green Revolution</u>: Meaning and Features – Impact of Green Revolution on Agricultural Production & Productivity, Distribution of Income and on Regional Distribution – Causes of Uneven & Limited Spread. 	

<ul style="list-style-type: none"> <u>Rural Credit & Capital Formation in Agricultural Sector</u>: The Problem of Rural Indebtedness and Need for Rural Credit – Different Sources of Short-term & Long-term Credit – Role of Cooperatives, Commercial Banks & Regional Rural Banks – Rural Credit & the Role of NABARD - Microfinance. <u>Agricultural Marketing</u>: Problems / Defects of Agricultural Marketing in India – Role of Co-operatives in Agricultural Marketing – Warehousing Facilities in India – Reforms in Agricultural Marketing with Special Reference to APMC Act. Globalization and Indian Agriculture.
F. Industrial Development (12 Lectures) <ul style="list-style-type: none"> <u>Industrial Production & Patterns</u>: Trends in Industrial Production and Changes in Industrial Pattern during the Plans Effects of Globalization on Indian Industry. Change in Industrial Policy Over Time <u>Small Scale & Cottage Industries</u>: Definition of Cottage and Small Scale Industrial Units – Role, Performance & Problems of Small-Scale and Cottage Industries in Indian Economy – Government Policy in Respect of Small-Scale and Cottage Industries.
References <ol style="list-style-type: none"> Datt and Sundharam: <i>Indian Economy</i> (S. Chand, Latest Edition) Mishra and Puri: <i>Indian Economy</i> (Himalaya Publishing House, Latest Edition) Uma Kapila: <i>Indian Economy – Issues in Development & Planning and Sectoral Aspects</i> (Academic Foundation, 19th Edn.) Joshi & Little: <i>India's Economic Reforms 1991-2001</i> (OUP) Bimal Jalan (Ed.): <i>The Indian Economy</i> (OUP) দেবেশ মুখার্জি : সমকালীন ভারতীয় অর্থনীতি (নিউ সেন্ট্রাল বুক এজেন্সি) বসাক ও চক্রবর্তী : ভারতের অর্থনীতির পরিচয় (বিদ্যদয় লাইব্রেরী)

(UGP/302/C-2C)	3.2 Core 2C: Discipline-2
(UGP/303/C-3C)	3.3 Core 3C: Discipline-3
(UGP/ECO/304/SEC-1)	3.4 SEC-1: Data Analysis
Credit- 02	Full Marks: 50 Classes: 30 (Lectures)
Course Outcomes: On successful completion of this course the students will learn the followings. <ol style="list-style-type: none"> Sources of economic data and data type How to compute summary statistics and do some basic statistical inference Use of appropriate statistical technique to represent data. 	
A. Statistical Data: Classification, Collection & Presentation <ul style="list-style-type: none"> Meaning of Statistical Data – Classification of Data -Variable & Attribute - Primary Data & Secondary Data - Methods of Collection of Data - Population & Sample - Complete Enumeration (Census) & Sample Survey- Random Sampling (Concept only). Tabulation & Diagrammatic Presentation of Data – Line, Bar & Pie Diagram. Frequency Distribution and its Diagrammatic Presentation: Construction of Frequency Distribution (Simple & Grouped) –Histogram, Ogive & Frequency Polygon. 	
B. Descriptive Statistics <ul style="list-style-type: none"> Measures of Central Tendency – Mean, Median & Mode (Concepts & Formulae Only) Measures of Dispersion – Range, Mean Deviation, Standard Deviation, Coefficient of Variation (Concepts & Formulae Only) Concepts of Skewness & Kurtosis Concept of Simple Correlation & Regression 	
C. Analysis of Indian Data	

Economic Surveys – RBI Bulletins – Handbook of Statistics for the Indian Economy (RBI) – ASI Data – Census Data - Foreign Trade Statistics – NSS Data

References

1. N. G. Das – *Statistical Methods* (Tata McGrawhill)
2. Nagar and Das – *Basic Statistics for Business and Economics*
3. Goon, Gupta and Dasgupta: *Basic Statistics*
4. R Spiegel and L.J. Stephen: *Statistics (Schaum Series)*
5. Official Websites of RBI, Govt. of India, CSO, NSS, ASI

Sample question

1. When was the 1st census conducted in India?
2. Which government organisations in India responsible for survey data collection?
3. What are the types of statistical data?
4. What is the name of the organisation which conducts census after every 10 years

SECOND YEAR: SEMESTER-IV

(UGP/ECO/401/C-1D)

4.1 Core-1D: Indian Economic Planning & Policy Issues

Credit- 06
Full Marks: 50
Classes: 60 (Lecture) + 15 (Tutorial)

Course Outcomes

On successful completion of the course, the students are able to

- Understand the basic structure of Indian Economy.
- Analyse the reasons behind income inequality and unemployment.
- Comprehensively interpret the reasons for low productivity in agriculture
- Explain the need of industrial planning and growth to foster Economic Development
- Justify the growth rate of the economy on account of planning

A. Indian Planning Experience

(15 Lectures)

- Definition of Economic Planning – The Rationale for Planning in a Mixed Developing Economy like India – Planning Vs Market – Concept of Decentralised Planning
- Planning Authority in India: National Development Council – Planning Commission – NITI Aayog – Reasons & Objectives behind formation of Niti Aayog
- Broad Objectives of Planning in India: Evolution of India's Development Goals & Strategies – Pre -1991 & Post-1991 Plans
- Overall Achievements & Failures of India's Five Year Plans

B. Public Sector in India

(05 Lectures)

- Public Sector: Meaning, Role, Performance & Problems of Public Sector Enterprises in India – Privatisation & Disinvestment Policy – Exit Policy.

C. Money, Banking & Monetary Policy

(15 Lectures)

- Concepts of Money Supply in India (M_1 , M_2 etc.)
- The Role of Commercial Banks in India – Nationalisation of Banks – Banking Sector Reforms – Causes & Consequences
- Features of Money and Capital Markets in India
- Reserve Bank of India and Monetary Policy.

D. Indian Public Finance

(15 Lectures)

- Sources of Revenue of Central and State Governments – Direct & Indirect Taxes – Major Heads of Expenditures – Plan vs. Non-plan Expenditures
- Centre-State Financial Relations – Role of Finance Commission of India
- Tax Reforms since 1991
- Components of Public Debt in India

E. India's Foreign Trade & Balance of Payments

(10 Lectures)

- Importance of Foreign Trade for India – Volume & Direction of Foreign Trade in the Post-Liberalisation Period - Reforms in Foreign Trade Policy since 1991 - SEZ Policy
- Trends of India's Balance of Payments in the Post-Liberalisation Period.

References

1. Datt and Sundharam: *Indian Economy* (S. Chand, Latest Edition)
2. Mishra and Puri: *Indian Economy* (Himalaya Publishing House, Latest Edition)
4. Uma Kapila: *Indian Economy – Issues in Development & Planning and Sectoral Aspects* (Academic Foundation, 19th Edn.)
5. Joshi & Little: *India's Economic Reforms 1991-2001* (OUP)
6. Bimal Jalan (Ed.): *The Indian Economy* (OUP)
7. দেবেশ মুখার্জি : সমকালীন ভারতীয় অর্থনীতি (নিউ সেন্ট্রাল বুক এজেন্সি)
8. বসাক ও চক্রবর্তী : ভারতের অর্থনীতির পরিচয় (বিদ্যদয় লাইব্রেরী)

Sample questions

1. Objective type questions (of 2 marks)

- a) What is decentralised planning?
- b) What is Disinvestment policy?
- c) Write down one source of revenue each for Central Government and State Government.
- d) Differentiate between direct and indirect tax.
- e) Who is considered as the Lender of Last Resort by the Govt. of India?
- f) When was first five year plan in India launched?
- g) What do you mean by M1?
- h) What is money market?

2. Short answer type questions (of 5 marks)

- a) Indicate the main areas of failure of Indian planning.
- b) Briefly explain the problems of Public Sector Enterprises in India in recent years.
- c) What were the reasons behind banking sector reforms in India?
- d) Discuss different concepts of money supply in India?

3. Long answer type questions (of 10 marks)

- a) Write a note on the volume and direction of trade in India in post-liberalization period.
- b) Discuss the reforms in tax structure in India since 1991.

(UGP/402/C-2D)

4.2 Core-2D: Discipline-2

(UGP/403/C-3D)

4.3 Core-3D: Discipline-3

(UGP/ECO/404/SEC-2)

4.4 SEC-2: Computer Application in Economics
Credit- 02
Full Marks: 50
Classes: 15 (Lec.) + 15 (Prc)

Course Outcomes

On successful completion of this course the students will expected to have the followings.

1. Exposure to word processing, data processing software
2. Acquire skill on analysis of socio economic data, reporting and presentation of data using suitable computer software
3. Better employability through skill building as per the market need

A. File Creation and Management System

- The File Tree - File Naming Conventions

B. Word Processing

- Basic Features of Text formatting - Creating Documents - Heading Styles - Creating Reference Lists.

C. Introduction to Excel/Spreadsheet for Economic Analysis of Data

- Types of Data – Time Series, Cross Section –Excel Basic – Data Entry & Creation of Tables - Formula and Functions - Sort and Filter.

D. Graphical Representation of Data Sets

Pie Chart, Bar Chart, Histogram, Frequency Polygon, Ogive, Bivariate Scatter Diagram.

E. Using Spreadsheet / Excel for Calculation of Descriptive Statistics

Mean, Median, Mode, Standard Deviation, Simple Correlation, and Regression.

F. Presentations

Creating Presentations - Pasting Charts etc in Presentations - Exporting Presentations as PDF.

References:

1. Ash Narayan Sah: *Data Analysis Using Microsoft Excel* (Excel Books India)
2. Gray Koop: *Analysis of Economic Data* (John Wiley & Sons Ltd)
3. Richard L.Kerns: *Essentials of Microsoft Windows, Word & Excel* (Prentice Hall India)
4. V. RajaRaman: *Fundamentals of Computers* (PHI, New Delhi)
5. Stephan Levine & Krehbiel Berenson: *Statistics for Managers Using Microsoft Excel* (PHI Learning)
6. A. Leon & M. Leon: *Introduction To Computers with MS Office* (TMH)

Sample questions**1. “Ctrl + Z” is the shortcut key for**

- a. Save file
- b. Cut
- c. Paste
- d. Undo

2. Word Processing software is also known as

- a. MS Word
- b. MS Excel
- c. MS Paint
- d. MS Windows

3. In MS Word what is gutter margin?

- a. Margin that is added to the left margin when printing
- b. margin that is added to right margin when printing
- c. Margin that is added to the binding side of page when printing
- d. Margin that is added to the outside of page when printing

4. In MS Word which can be used for quick access to commonly used commands and tools

- a. Status bar
- b. Tool bar
- c. Menu bar
- d. Title bar

5. Which elements are placed at the end of a document

- a. Footer
- b. Foot Note
- c. End Note
- d. Header

6. A number of letters that appear slightly above the normal text

- a. Superscript
- b. Subscript
- c. Supertext
- d. Toptext

7. A number of letter that appears little below the normal text

- a. Superscript
- b. Subscript
- c. Supertext
- d. Below text

THIRD YEAR: SEMESTER-V

(UGP/ECO/501/DSE-1A) 5.1 DSE-1A: Any one of the Following

5.1.1 Microeconomics-II

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Course outcome

On successful completion of the course, the students are able to

- Gain analytical skills for understanding Market structure
- Analyse the characteristics and pricing methods under monopoly
- Analyse the marginal productivity theory of distribution
- Understand how factor market works, illustrate basic tools in welfare economics and understand the concept of social welfare functions

Unit-1: Price Determination Under Different Market Structures

A. Theory of Perfect Competition

(12 Lectures)

- Assumptions of a Perfectly Competitive Market Model - AR and MR Curves under Perfect Competition
Short Run Equilibrium of a Perfectly Competitive Firm – Profit Maximising Price & Output – Break-even Point – Shut-down Price -Short Run Supply Curve of Firm & Industry
- Long Run Equilibrium of the Firm Under Perfect Competition – Long Run Supply Curve of the Industry - the Cases of Constant Cost, Increasing Cost & Decreasing Cost Industry - Price Determination in a Competitive Industry

B. Theory of Monopoly:

(12 Lectures)

- Sources & Major Features of Monopoly - AR and MR Curves under Monopoly – Relation among AR, MR and Elasticity of Demand
- Equilibrium: Price and Output Determination under Monopoly – Comparison of Perfect Competition & Monopoly
- The Concept of Price Discrimination: Conditions for Price Discrimination– Equilibrium under Price Discrimination – Concept of Dumping.

Unit-2: Theories of Factor pricing (30 Lectures)

A. Marginal Productivity Theory of Distribution

Assumptions of Marginal Productivity Theory – Concepts of MPP, MRP & VMP - Marginal Productivity Theory and Factor Price Determination – Limitations of Marginal Productivity Theory.

B. Theory of Rent

- Ricardian Theory of Rent
- Modern Theory of Rent –Quasi Rent

C. Theory of Wage

- Distinction between Money Wage and Real Wage
- Wage Determination under Competitive Set-up – Role of Trade Unions in Wage Determination.

D. Theories of Interest Rate

- Money & Real Interest
- Classical Theory of Interest - Neo-classical Loanable Funds Theory - Keynesian Liquidity Preference Theory

E. Theory of profit

- Gross and Net Profit- Elements of Profit - Risk and Uncertainty Theory of Profit - Innovation Theory of Profit.

Unit-3: Elementary Concepts of Welfare Economics(06 Lectures)

A. Concept of Social Welfare – Pareto Optimality Criterion of Welfare –Graphical Presentation of Pareto Optimality.

References

1. Samuelson & Nordhaus: *Economics* (Mc-GrawHill)
2. N. Gregory Mankiw: *Economics- Principles & Applications* (Cengage Learning India Pvt. Ltd., 2007)
3. Karl E. Case & Ray C. Fair: *Principles of Economics* (Pearson Education, 8th Edn.2007)
4. Joseph E. Stiglitz & Carl E. Walsh: *Economics* (W. W. Norton & Company, 2007)
5. Lipsey & Chrystal: *Economics* (Oxford University Press)
6. জয়দেব সরখেল : আধুনিক অর্থনীতির ভূমিকা, প্রথম খন্ড (বুক সিভিকিট)
7. সম্পদ মুখার্জী ও দেবেশ মুখার্জী : সমকালীন অর্থবিদ্যা (নিউ সেন্ট্রাল বুক এজেন্সি)
8. হরিদাস আচার্য : আধুনিক অর্থনীতি (প্রতিভা পাবলিকেশন)

Sample questions**1. Objective type questions (of 2 marks)**

- a) Write down any two features of a Perfectly Competitive Market.
- b) What do you mean by Shut Down Point?
- c) Write down the relation among AR, MR and ep.
- d) Define dumping.
- e) Define MPP and VMP.
- f) What is quasi-rent?
- g) Define Pareto Optimality.

2. Short answer type questions (of 5 marks)

- a) What is Price Discrimination? What are the conditions for Price Discrimination?
- b) What is Rent? Briefly explain Ricardian Theory of Rent.
- c) Write down the distinction between Money Wage and Real Wage. What role a trade union plays in wage determination?
- d) What is Profit? What are the elements of profit?
- e) What do you mean by Social Welfare? Briefly explain Pareto Optimality Criterion of Welfare

3. Long answer type questions (of 10 marks)

- a) Write down the equilibrium condition under Perfectly Competitive Market. Briefly explain Short Run Supply Curve under Perfectly Competitive Market.
- b) Discuss Marginal Productivity Theory of Distribution. What are its limitations?

5.1.2 Money & Banking

Credit- 06
Full Marks: 50
Classes: 60 (Lecture) + 15 (Tutorial)

Course outcome

On successful completion of the course, the students are able to

- Learn the various functions and classification of money
- Explain the concept of demand and supply of money and its theories
- Gain knowledge on the recent development in the Indian Money Market
- Understand the recent developments in the Indian Banking System
- Gain knowledge on the inflation, Deflation, and its effects

A. Money

(08 Lectures)

- Definition of Money – Kinds of Money: Fiduciary/ Debt/ Credit Money – Coins, Paper Currency & Deposit Money - Legal Tender or Fiat Money and Non-legal Tender or Credit Money Proper - Limited & Unlimited
- Legal Tender – e-Money & Plastic Money – Functions of Money – Money Vs. Near Money – Examples of Near Money - Value of Money – High-powered Money or Monetary Base - Measures of Money Supply.

B. Overview of The Financial System

(08 Lectures)

- Meaning & the Role/Functions of the Financial System - Constituents of the Financial System: Financial Assets/ Instruments; Financial Intermediaries/ Institutions; and Financial Markets
- Definition & Role of Financial Markets – Classification of Financial Markets: Money Market & Capital Market – Basic Distinction between Money Market & Capital Market
- Definition & Role of Financial Intermediaries – Classification of Financial Intermediaries: Banks and Non-Bank Financial Institutions (NBFIs)
- Financial Assets/Instruments: Distinction between Primary & Secondary Securities – Debt & Equity Instruments of Various Types – Bonds, Shares, Debentures etc. – Distinction between Bonds & Shares

C. Money Market

(06 Lectures)

- Features, Importance & Functions of the Money Market - Characteristics of Developed and Underdeveloped Money Markets
- Components of Money Market: Call Money Market - Commercial Bill Market - Treasury Bill Market – Repo & Reverse Repo Markets.

D. Capital Market

(12 Lectures)

- Features, Importance & Functions of the Capital Market - Characteristics of Developed and Underdeveloped Capital Markets
- Components of Capital Market: Gilt-edged Market and the Industrial Securities Market – Distinction between Primary Market and Secondary Market
- Features, Role & Functions of Stock Market or Stock Exchange

E. Banks: Commercial Banks & The Central Bank

(16 Lectures)

- Definition & Functions of Commercial Banks – Concepts of Primary & Derivative Deposits and the Process of Credit Creation by Commercial Banks – Role of Commercial Banks in Economic Development.
- Definition & Functions of Central Bank – Distinction between Central Bank & Commercial Banks – Central Bank & Monetary Policy: Definition, Goals, Targets, Indicators & Instruments of Monetary Policy – Various Types of Quantitative & Qualitative Instruments of Credit Control.

F. Non-Bank Financial Intermediaries

(05 Lectures)

- Distinction Between Commercial Banks & NBFIs – Validity of the Distinction - Examples of NBFIs – Development Banks, Mutual Funds, Insurance Companies - Central Bank's Control Over NBFIs.

G. Financial Markets and Interest Rates Behaviour

(05 Lectures)

- Real & Nominal Interest Rates – Sources of Interest Rate Differentials – Meaning of Term Structure of Interest Rates - Theories of Term Structure of Interest Rates: The Expectations Theory – The Liquidity or Risk Premium Theory – The Market Segmentation Theory

References

1. Suraj B. Gupta: *Monetary Economics- Institutions, Theory & Policy* (S.Chand & Co)
2. S. Gurusami: *Indian Financial System* (Tata McGraw Hill).
3. L. M. Bhole: *Financial Institutions and Markets* (Tata McGraw Hill).

4. R. R. Paul: *Monetary Economics* (Kalyani Publishers)
5. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions* (Pearson Education)
6. F. J. Fabozzi, F. Modigliani, F. J. Jones & M. G. Ferri: *Foundations of Financial Markets and Institutions* (Pearson Education).

Sample questions

1. Objective type questions (of 2 marks)

Write down the definition of the following concepts

- a) E-money
- b) Reverse Repo.
- c) High Powered money.
- d) Bond.
- e) Primary Deposit of commercial banks.
- f) Mutual fund.
- g) Real Interest rate.
- h) M1 as a measure of money supply.

2. Short answer type questions (of 5 marks)

- a) Write down the functions of commercial banks.
- b) Describe the expectation theory of the term structure of the interest rate.
- c) Explain the features of capital market.
- d) Write a short note on Gilt-edged market.
- e) What are the targets of monetary policy?
- f) Explain the functioning of the Non-Bank Financial Intermediaries.

3. Long answer type questions (of 10 marks)

- a) Discuss the various types of quantitative instruments of credit control of Central Bank.
- b) Explain the constituents and functions of Indian Financial System.

5.1.3 Environmental Economics

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Course outcome

The module aims to introduce students to the main theoretical and empirical concepts in environmental economics, equip students with a thorough analytical grasp of environmental policy theory, ranging from externalities to international environmental agreements, and familiarise students with the main issues in environmental valuation and with the basic features of the environmental policy tools. At the end of the module the students should be able to demonstrate their understanding of the economic concepts of environmental policy.

A. Introduction

(06 Lectures)

- Subject Matter of Environmental Economics – The Environment-Economy Interaction – Key Environmental Issues and Problems – Economic Way of Thinking about These Problems

A. Theory of Externalities & Market Failure

(14 Lectures)

- Definition of Market Failure & Externalities – Positive & Negative Externalities - Pareto Optimality and Market Failure in the Presence of Externalities – Pollution as Externality – Optimal Level of Pollution.
- Externalities and Property Rights - The Coase Theorem.
- Common Property Resources & The Tragedy of Commons
- Public Goods & Free Rider Problem

B. Design and Implementation of Environmental Policy

(12 Lectures)

- Overview: Determination of the Socially Efficient Level of Emission - Optimum Pollution
- Types of Pollution Control Policy: Direct Regulation or Command-and-Control Policies – Polluters Pay Principle (PPP)
- Emissions/Pollution Standard
- Pigouvian Taxes

- Emissions/Effluent Fee
- Standards Versus Fees and Taxes Versus Standards - Inefficiency of Standard-Setting
- Tradable Emissions/Pollution Permits – Advantages & Disadvantages

C. Environmental Valuation (12 Lectures)

- Meaning of Environmental Valuation – Valuation of Non-market Goods & Services – Use of Economic Value, Costs, Benefits, Willingness To Pay (WTP) & Willingness To Accept (WTA), Total Economic Value, Option Value, and Existence Value.
- Cost-Benefit Analysis of Environmental Policies & Regulations

D. International Environmental Problems (08 Lectures)

- Trans-Boundary Environmental Problems
- Global Warming
- Rain Forest Destruction
- Economics of Climate Change.
- North-South Divide

E. Environment & Sustainable Development (08 Lectures)

- An Overview of Economic Development & Environmental Change – Possibility of Environmental Degradation
- Concepts of Sustainable Development & Environmental Accounting - Objectives of Sustainable Development - Environmental Protection & Sustainable Development
- Population-Resource-Environment Interlinkage
- Poverty & Environment
- Growth Versus Environment – The Environmental Kuznets Curve
- Rural Development & the Environment – Urban Development & The Environment
- Sustainable Development from Indian Perspectives.

References:

1. Charles Kolstad: *Intermediate Environmental Economics* (Oxford University Press, 2nd edn. 2010).
2. Pearce & Turner: *Economics of Natural Resources & The Environment*
3. Hanley Shogren & B. White: *Environmental Economics* (CUP, 1999)
4. Tietenberg: *Environmental Economics*
5. Rabindranath Bhattacharya (ed.): *Environmental Economics – An Indian Perspective* (OUP)
6. Robert S. Pindyck, Daniel L. Rubinfeld, Prem L. Mehta: *Microeconomics, Chapter 18* (7th Edn. Pearson).
7. Michael P. Todaro & Stephen C. Smith: *Economic Development* (Pearson, 10th Edn.)
8. Sampat Mukherjee: *Contemporary Development Economics* (New Central Book agency)

Sample questions**1. Objective type questions (of 2 marks)**

- a) What are externalities?
- b) Give two examples of Common Property Resources.
- c) Write down four important environmental problems.
- d) What do you mean by sustainable development?
- e) What are the effects of global warming?
- f) What is a Pigouvian Tax?
- g) What do you mean by environmental valuation?
- h) What are the probable reasons for environmental degradation?

2. Short answer type questions (of 5 marks)

- a) Discuss briefly the interlinkage among poverty-resource and environment.
- b) What are the factors responsible for climate change?
- c) Name two types of market failure. Explain why each may cause market outcomes to be inefficient.
- d) Explain the features of public goods with an example. Who is called a “Free Rider”?
- e) What are advantages and disadvantages of Tradable Emissions/Pollution Permits Tradable Emissions/Pollution Permits
- f) What is cost benefit analysis of environmental policies and regulations?

3. Long answer type questions (of 10 marks)

- State and explain Coase Theorem. Coase Theorem
- “Economic growth versus environment”-Explain with the help of The Environmental Kuznets Curve.

(UGP/502/DSE-2A) **5.2 DSE-2A: Discipline-2**

(UGP/503/DSE-3A) **5.3 DSE-3A: Discipline-3**

(UGP/ECO/504/SEC-3) **5.4 SEC-3: Research Methodology**

Credit- 02

Full Marks: 50

Classes: 30 (Lectures)

Course Outcomes

The course imparts skills to undertake data based research. The student enrolling in this course would develop competency in executing sample surveys and would have reasonable exposure to a variety of secondary data sources.

Unit-1

- Understanding the Nature of Research
- Formulation of the Research Topic
- Review of Literature

Unit-2

- Approaches to Research and Research Strategy
- Research Ethics
- Using Secondary Data
- Using Primary Data – Collecting Data Through Observations/ Interviews/ Questionnaire

Unit-3

- Sample Selection Methods
- Analysing Data
- Writing Project Report - Referencing Styles

References

- Ranjit Kumar: *Research Methodology-A Step by Step Guide for Beginners* (Sage Publications, 4th Edn.)
- Uwe Flick: *Introducing Research Methodology- A Beginner's Guide to Doing a Research Project*, (Sage Publications)
- J. Bethlehem: *Applied Survey Methods- A Statistical Perspective* (Wiley)
- Wilkinson & Bhandarkar: *Methodology & Techniques of Social Research* (Himalaya Publishing)
- C.R.Kothari: *Research Methodology*

Sample questions**1. Objective type questions (of 2 marks)**

- What are the different source of secondary data ?
- Distinguish between population and sample.
- Name the different types of data collection methods.
- What is research methodology ?
- Distinguish between primary data and secondary data.
- What is the difference between qualitative and quantitative research ?
- Mention the styles of reference writing ?
- What is systematic sampling ?

2. Short answer type questions (of 5 marks)

- What is hypothesis ? Discuss different types of hypothesis.
- What is questionnaire ? Discuss the characteristics of a good questionnaire.
- What is review of literature ? Discuss its role in research methodology.
- What are the basic requirements of report preparation ? Discuss in brief.
- What do you mean by bibliography ? Discuss the importance of bibliography in research.
- What is meant by sampling in research ? Discuss various techniques of sampling.

3. Long answer type questions (of 10 marks)

- Define research. Explain the process of research in detail.
- What are the various sources of data collection? Explain with examples.

THIRD YEAR: SEMESTER-VI

(UGP/ECO/601/DSE-1B) 6.1 DSE-1B: Any one of the Following

6.1.1 Macroeconomics-II

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Course outcome

On successful completion of the course, the students are able to

- Gaining the concept of multiplier and its effects in an economy
- Accumulate knowledge on operation of acceleration and multiplier in an economy
- Demonstrate the general equilibrium model with various sectors
- Demonstrate the role of government in the subject
- Understand the sources of finance both public and private
- Understand the needs of public borrowing from all possible sources to meet the necessary public expenditure

A. The IS-LM Model in a Closed Economy

(10 Lectures)

- IS Curve: Definition of IS Curve – Product Market Equilibrium & Derivation of the IS Curve – Its Slope & Shifts
- LM Curve: Definition of LM Curve – Money Market Equilibrium & Derivation of the LM Curve – Its Slope & Shifts
- IS-LM Equilibrium: Determination of Equilibrium Level of Income and Rate of Interest in Terms of the IS-LM Model
- Comparative Static Analysis: Effects of Change in Saving, Investment, Government expenditure, Taxation and Money Supply.
- (Note: Mainly Diagrammatic Analysis; Use Equations as Required & Avoid Rigorous Mathematical Derivations)

B. The Simple AD-AS Model

(08 Lectures)

- The Aggregate Demand (AD) Curve: Concept & Slope – Why the AD Curve Slopes Downwards – Why the AD Curve Might Shift.
- The Aggregate Supply (AS) Curve: Concept – Short Run & Long Run AS Curves - Slope of AS Curve: Why the AS Curve Slopes Upwards in the Short Run – Why AS Curve is Vertical in the Long Run - Causes of Shifts of the AS Curve in the Short Run and in the Long Run.
- Macroeconomic Equilibrium: Interaction between Aggregate Demand & Aggregate Supply Curves and Determination of Equilibrium Output and Price Level.
- Comparative Static Analysis: Effects of Shifts in Aggregate Demand and Aggregate Supply. (Note: Simple Diagrammatic Analysis Only)

C. Banking

(10 Lectures)

- Commercial Banking: Definition & Functions of Commercial Banks – Concepts of Primary & Derivative Deposits and the Process of Credit Creation by Commercial Banks – Limitations of the Process of Credit Creation.
- Central Bank: Definition & Functions of Central Bank – Distinction between Central Bank & Commercial Banks – Central Bank & Monetary Policy: Definition, Objectives & Instruments of Monetary Policy - Quantitative & Qualitative Methods of Credit Control.

D. Public Finance

(12 Lectures)

- Objectives of Public Finance
- Public Goods: Definition & Characteristics of Public Goods – Distinction between Public Goods and Private Goods – Exclusion Principle & its Non-applicability in Case of Public Goods.
- Taxation: Canons of Taxation – Principles of Taxation: Benefit and Ability to Pay Principles – Classification: Direct & Indirect Taxes – Progressive, Regressive & Proportional Taxation – Burden of Taxation: Impact,

Incidence & Shifting of Taxes

- Public Debt: Purpose of Public Debt – Internal & External Public Debt – Burden of Public Debt
- Fiscal Policy: Objectives & Instruments of Fiscal Policy – Budget: Receipts & Expenditures – Revenue Account & Capital Account - Types of Budget – Different Forms of Budget Deficits.

E. International Trade

(12 Classes)

- Distinction between Internal & International Trade
- Basis of Trade: Absolute Advantage Theory of Adam Smith - Ricardian Theory of Comparative Advantage - Gains From Trade & Terms of Trade (concepts only).
- Trade Policy: Arguments for Free Trade & Protection – Basic Concepts of Tariff & Quota.

F. Balance of Payments & Exchange Rate

(08 Classes)

- Balance of Payments: Definitions of and Distinction between Balance of Trade and Balance of Payments – Components of BOP: Current Account & Capital Account.
- Exchange Rate: Definition – Distinction between Fixed & Flexible Exchange Rates – Market for Foreign Exchange – Determination of Exchange Rate.

REFERENCES

1. Samuelson & Nordhaus: Economics (McGraw-Hill)
2. Lipsey & Chrystal: Economics (Oxford University Press)
3. N. Gregory Mankiw: Principles of Macroeconomics (CENGAGE Learning, 4th Edn., 2007)
4. Soumyen Sikdar: Principles of Macroeconomics (Oxford University Press)
5. জয়দেব সরখেল : আধুনিক অর্থনীতির ভূমিকা, প্রথম খন্ড (বুক সিভিকিট)
6. সম্পদ মুখার্জী ও দেবেশ মুখার্জী : সমকালীন অর্থবিদ্যা (নিউ সেন্ট্রাল বুক এজেন্সি)
7. হরিদাস আচার্য : আধুনিক অর্থনীতি (প্রতিভা পাবলিকেশন)

Sample questions

1. Objective type questions (of 2 marks)

- a) Define an IS curve.
- b) What are the main functions of a commercial bank?
- c) What is public debt?
- d) What is international trade?
- e) What do you mean by exchange rate?
- f) What is balance of trade?
- g) What do you mean by direct and indirect taxes?
- h) What are primary deposits?

2. Short answer type questions (of 5 marks)

- a) Explain money market equilibrium and the derivation of the LM curve with the help of a diagram.
- b) Why is the aggregate supply curve vertical in the long run?
- c) What do you mean by monetary policy of the Central Bank? Mention two objectives of credit control policies of the Central Bank. Why is Central Bank regarded as lender of the last resort?
- d) What are the different types of government budget?

3. Long answer type questions (of 10 marks)

- a) Analyse Ricardo's theory of comparative cost advantage along with its limitations.
- b) Describe the process of credit creation by commercial banks.

6.1.2 Economic History of India (1857-1947)

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Course outcome

The course develops critical analytical skills and exposes students to understanding the intricacies of India's economic, political and social developments both in the past and present times. It increases their employability by enhancing their ability to deal with a variety of textual and statistical sources,

and to draw upon them to construct a coherent argument. These skills would be useful in a variety of careers in academics, research, journalism and the government.

A. Introduction (02 Lectures)

- Colonial Background – Overview of the Colonial Economy

B. Macro Trends (05 Lectures)

- National Income – Population - Occupational Structure.

C. Agriculture (15 Lectures)

- Agrarian Structure and Land Relations – A Brief Review of Land Settlements - Major Tenancy Reforms & their Implications
- Commercialization of Agriculture- Causes & Effects
- Famines & Famine Relief in India – Frequency, Nature and Causes of Famines.

D. Development of Railways and Irrigation (08 Lectures)

- Causes & Economic Effects of Development of Railways – Development of Irrigation System -Railway Vs Irrigation Debate

E. Deindustrialization & Growth of Modern Industries (15 Lectures)

- Meaning, Causes & Consequences of Deindustrialization - The Deindustrialization Debate
- Process of Industrial Transition in India - Evolution of Entrepreneurial and Industrial Structure - Nature of Industrialization in the Interwar Period - Constraints to Industrial Breakthrough.

F. Economy and State in the Imperial Context (15 Lectures)

- The Imperial Priorities and The Indian Economy: Forms & Consequences of Colonial Exploitation – Exploitation through International Trade and Capital Flows – Government and Fiscal policy – Theory of Economic Drain.

References

1. R.C. Dutt: *Economic History of India (Vols. I & II)*
2. Dhiresh Bhattacharya: *A Concise Economic History of India*
3. V. B. Singh: *Indian Economic History*
4. Tirthankar Roy: *The Economic History of India 1857-1947* (Oxford University Press, 3rd edition)
5. বরুণ চক্রবর্তী : ভারতের সংক্ষিপ্ত অর্থনৈতিক ইতিহাস (পশ্চিমবঙ্গ রাজ্য পুস্তক পর্ষদ)
6. সব্যসাচী ভট্টাচার্য : উপনিবেশিক ভারতের অর্থনীতি (আনন্দ পাবলিশার্স)
7. রণেশ রায়: উপনিবেশিক ভারতের রাষ্ট্রীয় অর্থনীতি (প্রগ্রেসিভ পাবলিশার্স)

Sample questions

1. Objective type questions (of 2 marks)

- a) What is meant by the term 'Deindustrialisation'?
- b) State the major tenancy reforms in India in the colonial period.
- c) State two causes of famine in Colonial India.
- d) What were the major demographic trends in colonial India?
- e) Write two effects of development of railways in India during the colonial period.
- f) State two causes of deindustrialization in India.
- g) Discuss two effects of commercialisation of agriculture under colonialism.
- h) State the major Tenancy Reforms prevalent in India in the colonial period.

2. Short answer type questions (of 5 marks)

- a) Briefly discuss the occupational structure of colonial India.
- b) What were the features of industrial development in the colonial period?
- c) Discuss briefly the Theory of Economic Drain.
- d) What were the positive effects of development of irrigation works in colonial India?
- e) Briefly discuss the consequences of deindustrialization in India in the colonial period.
- f) What are the causes of development of railways in colonial India?

3. Long answer type questions (of 10 marks)

- Discuss the Railway versus Irrigation debate in colonial India.
- Discuss the various forms and consequences of colonial exploitation in India.

6.1.3 Public Finance

Credit- 06 Full Marks: 50 Classes: 60 (Lecture) + 15 (Tutorial)

A. Introduction to Public Finance

(06 Lectures)

- Definition and Scope of Public Finance
- Types of Fiscal Functions – Allocation Function, Distribution Function and Stabilization Function – Fiscal Functions in a Developing Economy

B. Public Goods , Externalities & Market Failure

(10 Lectures)

- Overview of Public Goods: Concept of Public Goods – Characteristics of Public Goods – Distinction between Public Goods and Private Goods – Exclusion Principle & its Non-applicability in case of Public Goods
- Externalities: Types of externality - Positive and Negative Externalities (Concepts only) - Concept of Market Failure - Market Failure in case of Public Goods

C. Theory of Taxation

(18 Lectures)

- Definition of Taxes & Canons of Taxation
- Classification of Taxes: Direct and Indirect Taxes – Proportional, Progressive and Regressive Taxation
- Principles of Taxation: Benefit Principle – Equal Sacrifice Principle – Ability to Pay Principle
- Burden of Taxes: Impact, Shifting and Incidence of Taxes
- Effects of Taxes: Effects of Taxation on Income Distribution, Work Efforts and on Savings

D. Public Debt (06 Lectures)

- Meaning of Public Debt – Sources of Public Borrowings: Internal and External Public Debt – Effects and Burden of Public Debt.

E. Indian Public Finance

(20 Lectures)

- Objectives of Fiscal Policy – Budget & its Types - Components of Govt. Revenue & Expenditure - Components of Govt. Budgets – Different Forms of Budget Deficits
- Fiscal Federalism in India – Centre-State Financial Relation
- Current Issues in India's Tax System – Tax Reforms Since 1991

References:

- Musgrave: *Theory of Public Finance*
- H.L. Bhatia: *Public Finance* (Latest Edition).
- J. E. Stiglitz: *Economics of Public Sector* (W.W. Norton & Company, 3rd Edn. 2000)
- A. Ghosh & C. Ghosh: *Public Finance* (Prentice-Hall India, 2nd Edn. 2014)
- Subrata Ganguly - *Public Finance*
- Datt and Sundharam: *Indian Economy* (S. Chand, Latest Edition)
- Misra and Puri: *Indian Economy* (Himalaya Publishing House, Latest Edition)
- জয়দেব সরখেল: রাষ্ট্রীয় অর্থনীতি (বুক সিভিকিট)

Sample questions

1. Objective type questions (of 2 marks)

- What do you mean by Public Finance?
- What do you mean by Public Goods?
- What is externality?
- What do you mean by Public Debt?
- What is Proportional Tax?
- What is Balanced Budget?
- Distinguish between Shifting of Tax and Incident of Tax?
- Write two sources of revenue of the State Government.

2. Short answer type questions (of 5 marks)

- What are the properties of Public goods ? Give an example of Public good?
- Write a short note on the burden of internal public debt.
- What is a tax? What are the canons of taxation?
- What is meant by the progressive system of taxation? Why the tax system of a country is made progressive?
- In brief, enumerate the major sources of revenue of Central Government.
- Discuss briefly the Ability of Pay Principle of taxation.

3. Long answer type questions (of 10 marks)

- What do you mean by Union-State financial relation? Write a brief note on Union-State financial relation in India?
- Discuss the reforms in tax structure in India since 1991.

(UGP/602/DSE-2B)

6.2 DSE-2B: Discipline-2

(UGP/603/DSE-3B)

6.3 DSE-3B: Discipline-3

(UGP/ECO/604/SEC-4) 6.4

SEC-4: Contemporary Economic Issues

Credit- 02
Full Marks: 50
Classes: 30 (Lectures)

Course outcome

On successful completion of the course, the students are able to

- Describe the various types taxes among various classes of people
- Understand the causes of growing public expenditure for various programs
- Understand the needs of public borrowing from all possible sources to meet the necessary public expenditure
- The meaning the inflation and deflation. Also will assess by important of budget.
- Extract the knowledge on planning techniques for economic development
- Explain the PDS and agriculture price policy.

A. Understanding Economic Development

(10 Lectures)

- Conceptual Issues about the Relationship between Growth & Development
- Evolution of the Concept of Economic Development & its Measurement:
- Traditional View of Development - Use of National & Per Capita Income as Index of Economic Development
- Modern View of Development: PQLI & Basic Needs Approach in the Seventies – Concept of Human Development & Introduction of “Human Face” in the Nineties – Construction & Use of Human Development
- Index (HDI) for Measuring & Comparing Levels of Development – Concept of Human Deprivation - The Human Poverty Index (HPI) – Gender Related Development Index (GDI)
- Sen’s Capabilities Approach to Development – Development as Freedom & Poverty as a Measure of Capability Failure.
- Alternative Concepts of Development: Top-Down Development, Participatory Development, Inclusive Development & Sustainable Development

B. Understanding Fiscal Policy & Government Budget

(08 Lectures)

- Meaning & Objectives of Fiscal Policy – Need for Govt. Spending & Areas of Govt. Spending
- Government Budget-Types, Structure & Elements: Balanced, Surplus, and Deficit Budgets - Expenditure & Receipts – Concepts of Current & Capital Account
- Classification of Expenditure: Capital Expenditure & Revenue expenditure – Plan & Non-Plan Expenditure
- Sources of Revenue: Tax & Non-Tax Revenue
- Tax Revenue: Types of Tax – Direct Tax & Indirect Tax – Concepts of VAT & Goods and Services Tax (GST)
- Non-Tax Revenue: Earnings from Public Undertakings, Interest on Loans.
- Concepts of Budget Deficit: Fiscal Deficit, Primary Deficit & Revenue Deficit – Impact of Fiscal Deficits on

Economy & Needs To Control Fiscal Deficits

- Understanding the Process of Budget Making in India – Analysis of Budget in Terms of Different Parameters like Trends in Deficits, Proposed Sources of Revenue & Expected Growth in Revenue, Expenditure Pattern and The Thrust Areas of the Budget.

C. Some Contemporary Issues of The Indian Economy (12 Lectures)

- Competing & Complementary Roles of Agriculture & Industry in Economic Development of India
- Urban Bias in Development Strategies and The Migration & Urbanization Dilemma
- Problems of Land Acquisition and Industrialisation
- Growth of Service Sector & Service-led Growth
- Food Security, Food Procurement & PDS
- The Parallel Economy in India: Concept of Black Money – Estimates – Sources – Impacts – Measures to Tackle Black Money

References

1. Michael P. Todaro & Stephen C. Smith: *Economic Development* (Pearson, 10th Edn.)
2. Debraj Ray: *Development Economics* (Oxford University Press, 2009)
3. Musgrave: *Theory of Public Finance*
4. H.L. Bhatia. *Public Finance*. (Fifteenth Revised Edition).
5. Sampat Mukherjee: *Contemporary Development Economics* (New Central Book agency)
6. Datt and Sundharam: *Indian Economy* (S. Chand, Latest Edition)
7. Misra and Puri: *Indian Economy* (Himalaya Publishing House, Latest Edition)
8. Pranab Mukherjee (2012): “Bdget Making” in K. Basu & A. Maertens(Eds), *The New Oxford Companion To Economics in India* (OUP)
9. Uma Kapila (2016): “Fiscal & Budgetary Developments”, in *Indian Economy Since Independence*
a. (Academic Foundation, Latest Edn.)
10. “Understanding the Budget Concepts & Terminologies”, in Centre for Budget & Governance Accountability Website

Sample questions

1. Objective type questions (of 2 marks)

- a) What is meant by HDI?
- b) What is Balanced Budget?
- c) What is Primary Deficit?
- d) Distinguish between Direct Tax and Indirect Tax.
- e) Write the full form of PDS? State any two functions of PDS.
- f) What is VAT?
- g) What is meant by Sustainable Development?
- h) What is HPI?

2. Short answer type questions (of 5 marks)

- a) What is the relationship between Growth and Development?
- b) Can per capita income act as an index of development?
- c) What are the objectives of fiscal policy of government?
- d) Briefly explain Sen’s Capabilities Approach to Development.
- e) Distinguish between i) Current Account and Capital Account and ii) Capital Expenditure and Revenue Expenditure.

3. Long answer type questions (of 10 marks)

- a) What is Black Money? What are the sources of Black Money? What measures may be undertaken to control Black Money?
- b) Discuss the various sources of revenue of the government.