UNIVERSITY OF CALCUTTA

NotificationNo.CSR/13/2023

It is notified for information of all concerned that in terms of the provisions of Section 54 of the Calcutta University Act, 1979, (as amended), and, in exercise of his powers under 9(6) of the said Act, the Vice-Chancellor has, by an order dated 11.07.2023 approved the Syllabi of the under mentioned subjects for semester wise Four-year (Honours & Honours with Research) / Three-year (Multidisciplinary) programme of U.G. courses of studies, as applicable under CCF,2022 . under this University, as laid down in the accompanying pamphlet.

Name of Subject:

1. Anthropology
2. BBA
3. Bengali
4. BFAD
5. Bio Chemistry
6. Botany
7. Chemistry
8. Commerce
9. Economics
10. Education
11. English
12. Geology
13. Hindi
14. History,Islamic History & Culture
15. Home Science
16. Human Rights
17. Journalism & Mass Communication
18. Mathematics
19. Microbiology (Honours)
20. Molecular Biology
21. Philosophy
22. Physiology
23. Political Science
24. Psychology
25. Social Science
26. Sociology
27. Urdu
28. Women's Studies
29. Zoology

The above shall be effective from the academic session 2023-2024.

SENATE HOUSE

KOLKATA-700 073

Prof.(Dr.) Debasis Das   12/7/2023

Registrar

Economics (Major- Minor)

Sem	Course	Name of the Paper	Code (Th)	Code (Tu/ P)
		Major (4 Credits)		
1	CC1	Microeconomics (I)	ECON-H-CC1-1-Th	ECON-H-CC1-1-Tu
2	CC2	Macroeconomics (I)	ECON-H-CC2-2-Th	ECON-H-CC2-2-Tu
3	CC3	Microeconomics (II)	ECON-H-CC3-3-Th	ECON-H-CC3-3-Tu
3	CC4	Development Economics (I)	ECON-H-CC4-3-Th	ECON-H-CC4-3-Tu
4	CC5	Mathematical Economics (I)	ECON-H-CC5-4-Th	ECON-H-CC5-4-Tu
4	CC6	Macroeconomics (II)	ECON-H-CC6-4-Th	ECON-H-CC6-4-Tu
4	CC7	Statistics for Economics	ECON-H-CC7-4-Th	ECON-H-CC7-4-Tu
4	CC8	Indian Economics (I)	ECON-H-CC8-4-Th	ECON-H-CC8-4-Tu
5	CC9	Microeconomics (III)	ECON-H-CC9-5-Th	ECON-H-CC9-5-Tu
5	CC10	Macroeconomics (III)	ECON-H-CC10-5-Th	ECON-H-CC10-5-Tu
5	CC11	Mathematical Economics (II)	ECON-H-CC11-5-Th	ECON-H-CC11-5-Tu
5	CC12	Econometrics (I)	ECON-H-CC12-5-Th	ECON-H-CC12-5-Tu
6	CC13	International Economics (I)	ECON-H-CC13-6-Th	ECON-H-CC13-6-Tu
6	CC14	Environmental & Resource Economics (I)	ECON-H-CC14-6-Th	ECON-H-CC14-6-Tu
6	CC15	Public Economics (I)	ECON-H-CC15-6-Th	ECON-H-CC15-6-Tu
6		Summer Internship		
7	CC16	Financial Economics (I)	ECON-H-CC16-7-Th	ECON-H-CC16-7-Tu
7	CC17	Development Economics (II)	ECON-H-CC17-7-Th	ECON-H-CC17-7-Tu
7	CC18	Environmental & Resource Economics (II)	ECON-H-CC18-7-Th	ECON-H-CC18-7-Tu
7	CC19	Advanced Microeconomic Theory	ECON-H-CC19-7-Th	ECON-H-CC19-7-Tu
7*	CC20	A) PUBLIC ECONOMICS (II)/ B) INDIAN ECONOMICS (II) OR DISSERTATION*	ECON-H-CC20(A)-7-Th/ ECON-H-CC20(B)-7-Th	ECON-H-CC20(A)-7-Tu/ ECON-H-CC20(B)-7-Tu
8	CC21	Econometrics (II)	ECON-H-CC21-8-Th	ECON-H-CC21-8-P
8	CC22	International Economics (II)	ECON-H-CC22-8-Th	ECON-H-CC22-8-Tu
8	CC23	Advanced Macroeconomic Theory	ECON-H-CC23-8-Th	ECON-H-CC23-8-Tu

Sem	Code	Name of the Paper	Code (Th)	Code (Tu/P)
8*	CC24	A) FINANCIAL ECONOMICS (II)/ B) MANAGERIAL ECONOMICS OR. DISSERTATION*	ECON-H-CC24 (A)-8-Th/ ECON-H-CC24 (B)-8-Th	ECON-H-CC24 (A)-8-Tu/ ECON-H-CC24 (B)-8-Tu
8*	CC25	A) GENDER ECONOMICS / B) INDIAN ECONOMIC HISTORY OR. DISSERTATION*	ECON-H-CC25 (A)-8-Th/ ECON-H-CC25 (B)-8-Th	ECON-H-CC25 (A)-8-Tu/ ECON-H-CC25 (B)-8-Tu
Sem		SEC (4 Credits)		
1	SEC1	Introductory Statistics & Application (I)	ECON-H-SEC1-1-Th	ECON-H-SEC1-1-Tu
2	SEC2	Introductory Statistics & Application (II)	ECON-H-SEC2-2-Th	ECON-H-SEC2-2-P
3	SEC3	Data Analysis and Research Methodology	ECON-H-SEC3-3-Th	ECON-H-SEC3-3-Tu/P
Sem		IDC (3 Credits)		
1/2/3	IDC	Elementary Economics	ECON-H-IDC-1/2/3-Th	ECON-H-IDC-1/2/3-Tu

Sem	Minor (4 Credits)		
	Name of the Paper	Code (Th)	Code (Tu/ P)
1 (or 3)	Microeconomics (I)	ECON-H-CC1-1-Th/ ECON-H-CC1-3-Th	ECON-H-CC1-1-Tu/ ECON-H-CC1-3-Tu
2 (or 4)	Macroeconomics (I)	ECON-H-CC2-2-Th/ ECON-H-CC2-4-Th	ECON-H-CC2-2-Tu/ ECON-H-CC2-4-Tu
5	Development Economics (I)	ECON-H-CC4-5-Th	ECON-H-CC4-5-Tu
6	Indian Economics (I)	ECON-H-CC8-6-Th	ECON-H-CC8-6-Tu

ECONOMICS [MDC- Core Course (CC)] (4 Credits)					
Sem	Paper	Course	Name of the Paper	Code (Th)	Code (Tu)
1	CC1/ CC2	MDC 1	Microeconomics (I)	ECON-MD-CC1-1-Th	ECON-MD-CC1-1-Tu
2	CC1/ CC2	MDC 2	Macroeconomics (I)	ECON-MD-CC2-2-Th	ECON-MD-CC2-2-Tu
3	CC1/ CC2	MDC 3	Development Economics (I)	ECON-MD-CC3-3-Th	ECON-MD-CC3-3-Tu
4	CC1/ CC2	MDC 4	Indian Economics (I)	ECON-MD-CC4-4-Th	ECON-MD-CC4-4-Tu
	CC1/ CC2	MDC 5	Sustainable Development	ECON-MD-CC5-4-Th	ECON-MD-CC5-4-Tu
5	CC1/ CC2	MDC 6	Economic History of India (1857-1947)	ECON-MD-CC6-5-Th	ECON-MD-CC6-5-Tu
5	CC1	MDC 7	Public Finance	ECON-MD-CC7-5-Th	ECON-MD-CC7-5-Tu
6	CC2			ECON-MD-CC7-6-Th	ECON-MD-CC7-6-Tu
6	CC1/ CC2	MDC 8	Rural Development	ECON-MD-CC8-6-Th	ECON-MD-CC8-6-Tu

Sem	ECONOMICS [MDC- Minor] (4 Credits)			
	Course	Name of the Paper	Code (Th)	Code (Tu)
3	MDC_m 1	Microeconomics (I)	ECON-MD-CC1-3-Th	ECON-MD-CC1-3-Tu
4	MDC_m 2	Macroeconomics (I)	ECON-MD-CC2-4-Th	ECON-MD-CC2-4-Tu
5	MDC_m 3	Development Economics (I)	ECON-MD-CC3-5-Th	ECON-MD-CC3-5-Tu
5	MDC_m 4	Indian Economics (I)	ECON-MD-CC4-5-Th	ECON-MD-CC4-5-Tu
6	MDC_m 5	Sustainable Development	ECON-MD-CC5-6-Th	ECON-MD-CC5-6-Tu
6	MDC_m 6	Economic History of India	ECON-MD-CC6-6-Th	ECON-MD-CC6-6-Tu

Sem	SEC (4 Credits)		
	Name of the Paper	Code (Th)	Code (Tu)
1/ 2/ 3	A) Economic Data Analysis and Report Writing/ B)Entrepreneurship and Development	ECON-MD-SEC1 (A)-1-Th or, ECON-MD-SEC2 (A)-2-Th or, ECON-MD-SEC3 (A)-3-Th/ ECON-MD-SEC1 (B)-1-Th or, ECON-MD-SEC2 (B)-2-Th or, ECON-MD-SEC3 (B)-3-Th	ECON-MD-SEC1 (A)-1-Tu or, ECON-MD-SEC2 (A)-2-Tu or, ECON-MD-SEC3 (A)-3-Tu/ ECON-MD-SEC1 (B)-1-Tu or, ECON-MD-SEC2 (B)-2-Tu or, ECON-MD-SEC3 (B)-3-Tu

Sem	IDC (3 Credits)		
	Name of the Paper	Code (Th)	Code (Tu)
1/ 2/ 3	Elementary Economics	ECON-MD-IDC1-1-Th or, ECON-MD-IDC2-2-Th or, ECON-MD-IDC3-3-Th	ECON-MD-IDC1-1-Tu or, ECON-MD-IDC2-2-Tu or, ECON-MD-IDC3-3-Tu

Economics Core Course I: ECON-H-CC1-1-Th
Microeconomics (I)
Marks: 75   **Credits: 3**
No. of Lecture hours (Th): 45
[For Semester-I]

Unit 1: Exploring the subject matter of Economics   **5 lecture hours**

1.1 Scope and Method of Economics: Wants, Scarcity, Competing Ends and Choice - Defining Economics, Thinking like an economist: Basic Economics Questions, Households and firms, Demand and Supply, Basic concepts of Utility, basic concepts of production-Production function, Definition of Average and Marginal Product, Microeconomics and Macroeconomics, Normative Economics and Positive Economics

1.2 Principles of Microeconomics – principles of individual decision making and principles of economic interactions – trade off, opportunity cost, efficiency, marginal changes and cost-benefit, trade, market economy, property rights, market failure, externality and market power.

1.3 Interdependence and the Gains from Trade- production possibilities frontier and increasing costs, absolute and comparative advantage, comparative advantage and gains from trade.

Unit 2: Utility Theory   **20 lecture hours**
(Focus on intuitive explanation and diagrams. Learning to analyze without using calculus a must)
2.1 Cardinal and Ordinal Approach.

2.2 Utility in Cardinal Approach- Utility and choice, Total Utility and Marginal Utility, Utility and choice-maximization, marginal utility, theory of demand

2.3 Ordinal utility: Assumptions on preference ordering, Indifference curve (IC), Marginal rate of substitution and convexity of IC, Budget constraint, Consumers 'equilibrium-interior and corner,

Unit 3: Demand and Supply: How Markets Work   **8 lecture hours**
3.1 Elementary theory of Demand: Factors influencing household demand and market demand, the demand curve, movement along and shift of the demand curve

3.2 Elementary theory of Supply: factors influencing supply, the supply curve, movement along and shift of the supply curve

3.3 The Elementary theory of market price: Determination of equilibrium price in a competitive market.

Unit 4: Market and Adjustments   **4 lecture hours**
4.1 The Evolution of Market Economies, Price System and the Invisible Hand

4.2 The Decision-takers - households, firms and central authorities

4.3 The Concepts of Markets- individual market, separation of individual markets, interlinking of individual

markets. Difference among markets- competitiveness, goods and factor markets, free and controlled markets. Market and non-market sectors, public and private sectors, economies- free market, command and mixed.

4.4 Different goods: Public goods, Private goods, Common resources and Natural Monopolies.

Unit 5: Market Sensitivity and Elasticity   **8 lecture hours**

5.1 Importance of Elasticity in Choice-Decisions

5.2 Method of Calculation- Arc Elasticity, Point Elasticity-definition

5.3 Demand and supply Elasticities-types of elasticity and factors affecting elasticity, Demand Elasticity and Revenue, Long run and Short run elasticities of Demand and Supply

5.4 Income and Cross Price Elasticity

5.5 Applications: Case studies – OPEC and Oil Price

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Economics Core Course I: ECON-H-CC1-1-Tu
Microeconomics (I)
Marks: 25   **Credit: 1**
No. of Lecture hours (Tu): 15
[For Semester-I]

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Mode of tutorial Examination: Viva or Presentation plus viva

Tutorial contact hours: 15 [for Revision, Doubt Clearing, Solving Problems]

- Tutorial classes are introduced per course to give the students an idea of detailed understanding of the course and also to build their confidence on the subject in terms of (i) solving problems, (ii) presenting a paper in terms of board work or power point,(iii) preparation of term paper etc.
- A **Tutorial** class also helps a teacher to clarify any topic in detail to the students.
- A **Tutorial** contact hour has been meant to promote teacher-student academic interaction.
- The norm of examination for this **Tutorial** part of the course will be **Viva, or presentation plus viva, unless otherwise mentioned.**

Texts/ References:

1. G.Mankiw. 2007, Economics: Principles and Applications, India edition by South Western, Cengage Learning
2. R.G. Lipsey. An Introduction to Positive Economics, ELBS (6th edition)
3. Lipsey, R. and Chrystal, A. 2007 Economics, OUP
4. Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson
5. G.S.Maddala and E. Miller, 1989, Microeconomics, Prentice Hall, McGraw Hill International Editions

6. Karl e Case and Ray C Fair, Principles of Economics, Pearson Education, 8th Edition, 2007

7. P Samuelson and W.Nordhaus, Economics, McGraw hill International Edition (14th edition or later edition)

8. J.E.Stiglitz and C.E.Walsh, Principles of Economics, WW Norton and Company, NY, (3rd edition or later edition)

9. Hal. R Varian , Intermediate Microeconomics, A modern Approach, WW Norton and Company, 8th edition, 2010 (T)

10. Gravelle, H. and Rees,R. , Microeconomics, Prentice Hall

11. Ryan, W.J.L. and Pearce : Price Theory and Applications , Macmillan Education, UK

12. Ferguson, C.E. and Gould, J.P. : Microeconomic Theory, Aitbs Publishers and Distributors, New Delhi.

13. Satya Chakrabarty, Microeconomics, Allied Publishers

14. Gould, J.P and E.P. Lazear: Microeconomics Theory, McGraw-Hill

1.National Income Accounting   **Lecture hours 12**

1.1 Macroeconomic data- Basic concepts of National Income accounting. The circular flow (three sector).
1.2 Concepts of GNP, GDP, NNP, and NDP at market price and at factor cost- Real and Nominal, -Implicit deflator.
1.3 The measurement of National Income. The problem of double counting.
1.4 The role of Government. Concepts of Corporate Income, Corporate Savings, Personal Income, Personal Disposable Income and Personal Savings.
1.5 Saving-Investment gap and its relation with budget deficit and trade surplus. National Income accounting and cost of living.

2. Income Determination in the Short Run (Part-I):
The Simple Keynesian Model in a Closed Economy

                                                                        Lecture hours 12

2.1 Consumption Function; the Keynesian Saving Function; stability of equilibrium; the concept of effective demand- the concept of demand-determined output
2.2 Equilibrium Income determination in SKM; the Simple Keynesian Multiplier ; the paradox of thrift; the SKM in a Closed Economy with Government; Government expenditure and Tax
2.3 Balanced Budget Multiplier

3. Basic theory of Investment   **Lecture hour 3**

3.1 Investment function: Determinants of investment. -Concepts of Marginal productivity of capital
3.2 Marginal efficiency of capital (MEC) and Marginal efficiency of investment (MEI).
.
4. The Classical system   **Lecture hours 12**

4.1 Basic ideas of Classical Macroeconomics; Say 's Law and Quantity Theory of Money
4.2 Loanable fund theory
4.3 The Classical Theory of Income and Employment determination
4.4 Full Employment and wage-price flexibility; Neutrality of Money
4.5 Classical Dichotomy (Basic Concept).

5. Inflation   **Lecture hours 6**

5.1 Concepts and types - Inflationary Gap, Demand pull vs. Cost push inflation,
5.2 Anti-inflationary policy

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Economics Core Course II: ECON-H-CC2-2-Tu

Macroeconomics (I)

Marks: 25   *Credit: 1*

No. of Lecture hours (Tu): 15

[For Semester-II]

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Mode of Tutorial Examination: Viva, or Presentation plus viva

Tutorial contact hours: 15 [for Revision, Doubt Clearing, Solving Problems]

●   Tutorial classes are introduced per course to give the students an idea of detailed understanding of the course and also to build their confidence on the subject in terms of (i) solving problems, (ii) presenting a paper in terms of board work or power point,(iii) preparation of term paper etc.
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8.   Ackley Gardner (old), Macroeconomic Theory, Macmillan, 1961
9.   Ackley Gardner(new), Macroeconomics : Theory and Policy : Macmillan
10.   J.R.Hicks. The Social Framework: An introduction to Economics, Clarendon Press, 3rd Edition, 1960
11.   Sikdar Soumyen, Principles of Macroeconomics, Oxford University Press

Marks: 75   **Credits: 3**

No. of Lecture hours (Th): 45
[For Semester-I]

Unit 1: Exploring the subject matter of Economics   5 lecture hours

1.1 Scope and Method of Economics: Wants, Scarcity, Competing Ends and Choice - Defining Economics, Thinking like an economist: Basic Economics Questions, Households and firms, Demand and Supply, Basic concepts of Utility, basic concepts of production-Production function, Definition of Average and Marginal Product, Microeconomics and Macroeconomics, Normative Economics and Positive Economics

1.2 Principles of Microeconomics – principles of individual decision making and principles of economic interactions – trade off, opportunity cost, efficiency, marginal changes and cost-benefit, trade, market economy, property rights, market failure, externality and market power.

1.3 Interdependence and the Gains from Trade- production possibilities frontier and increasing costs, absolute and comparative advantage, comparative advantage and gains from trade.

Unit 2: Utility Theory   20 lecture hours
(Focus on intuitive explanation and diagrams. Learning to analyze without using calculus a must)
2.1 Cardinal and Ordinal Approach.
2.2 Utility in Cardinal Approach- Utility and choice, Total Utility and Marginal Utility, Utility and choice-maximization, marginal utility, theory of demand
2.3 Ordinal utility: Assumptions on preference ordering, Indifference curve (IC), Marginal rate of substitution and convexity of IC, Budget constraint, Consumers 'equilibrium-interior and corner,

Unit 3: Demand and Supply: How Markets Work   8 lecture hours
3.1 Elementary theory of Demand: Factors influencing household demand and market demand, the demand curve, movement along and shift of the demand curve
3.2 Elementary theory of Supply: factors influencing supply, the supply curve, movement along and shift of the supply curve
3.3 The Elementary theory of market price: Determination of equilibrium price in a competitive market.

Unit 4: Market and Adjustments   4 lecture hours
4.1 The Evolution of Market Economies, Price System and the Invisible Hand
4.2 The Decision-takers - households, firms and central authorities

4.3 The Concepts of Markets- individual market, separation of individual markets, interlinking of individual markets. Difference among markets- competitiveness, goods and factor markets, free and controlled markets. Market and non-market sectors, public and private sectors, economies- free market, command and mixed.

4.4 Different goods: Public goods, Private goods, Common resources and Natural Monopolies.

Unit 5: Market Sensitivity and Elasticity   **8 lecture hours**

5.1 Importance of Elasticity in Choice-Decisions

5.2 Method of Calculation- Arc Elasticity, Point Elasticity-definition

5.3 Demand and supply Elasticities-types of elasticity and factors affecting elasticity, Demand Elasticity and Revenue, Long run and Short run elasticities of Demand and Supply

5.4 Income and Cross Price Elasticity

5.5 Applications: Case studies – OPEC and Oil Price

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Economics Core Course I:
ECON-H-CC1-1-Tu/
ECON-H-CC1-3-Tu
Microeconomics (I)

Marks: 25   **Credit: 1**

No. of Lecture hours (Tu): 15
[For Semester-I/ III]

Mode of tutorial Examination: Viva or Presentation plus viva

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Tutorial contact hours: 15 [for Revision, Doubt Clearing, Solving Problems]

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4. Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson

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7.   P Samuelson and W.Nordhaus, Economics, McGraw hill International Edition (14th edition or later edition)

8.   J.E.Stiglitz and C.E.Walsh, Principles of Economics, WW Norton and Company, NY, (3rd edition or later edition)

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Economics Core Course II:

ECON-H-CC2-2-Th/

ECON-H-CC2-4-Th

Macroeconomics (I)

Marks: 75   *Credits: 3*

No. of Lecture hours (Th): 45

[For Semester-II]

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1.National Income Accounting   **Lecture hours 12**

1.1 Macroeconomic data- Basic concepts of National Income accounting. The circular flow (three sector).
1.2 Concepts of GNP, GDP, NNP, and NDP at market price and at factor cost- Real and Nominal, -Implicit deflator.
1.3 The measurement of National Income. The problem of double counting.
1.4 The role of Government. Concepts of Corporate Income, Corporate Savings, Personal Income, Personal Disposable Income and Personal Savings.
1.5 Saving-Investment gap and its relation with budget deficit and trade surplus. National Income accounting and cost of living.

2. Income Determination in the Short Run (Part-I):
The Simple Keynesian Model in a Closed Economy
                                                                  Lecture hours 12

2.1 Consumption Function; the Keynesian Saving Function; stability of equilibrium; the concept of effective demand- the concept of demand-determined output
2.2 Equilibrium Income determination in SKM; the Simple Keynesian Multiplier ; the paradox of thrift; the SKM in a Closed Economy with Government; Government expenditure and Tax
2.3 Balanced Budget Multiplier

3. Basic theory of Investment   **Lecture hour 3**

3.1 Investment function: Determinants of investment. -Concepts of Marginal productivity of capital
3.2 Marginal efficiency of capital (MEC) and Marginal efficiency of investment (MEI).
.
4. The Classical system   **Lecture hours 12**

4.1 Basic ideas of Classical Macroeconomics; Say 's Law and Quantity Theory of Money
4.2 Loanable fund theory
4.3 The Classical Theory of Income and Employment determination
4.4 Full Employment and wage-price flexibility; Neutrality of Money
4.5 Classical Dichotomy (Basic Concept).

5. Inflation   **Lecture hours 6**

5.1 Concepts and types - Inflationary Gap, Demand pull vs. Cost push inflation,
5.2 Anti-inflationary policy

Economics Core Course II:

ECON-H-CC2-2-Tu/

ECON-H-CC2-4-Tu

Macroeconomics (I)

Marks: 25   *Credit: 1*

No. of Lecture hours (Tu): 15

[For Semester-II]

Mode of Tutorial Examination: Viva, or Presentation plus viva

Tutorial contact hours: 15 [for Revision, Doubt Clearing, Solving Problems]

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8.   Ackley Gardner (old), Macroeconomic Theory, Macmillan, 1961
9.   Ackley Gardner(new), Macroeconomics : Theory and Policy : Macmillan
10.   J.R.Hicks. The Social Framework: An introduction to Economics, Clarendon Press, 3rd Edition, 1960
11.   Sikdar Soumyen, Principles of Macroeconomics, Oxford University Press

Introductory Statistics and Applications (I)

Marks: 75   *Credits: 3*

No. of Lecture hours (Th): 45
[For Semester-I]

Introductory Statistics (Theory)   **45 Lecture Hours**

Unit 1: Introduction and Overview   **Lecture hours 10**

1.1 Subject matter of Statistics

1.2 Basic Steps in Statistical Methods – Collection, Presentation and Analysis of Data

1.2.1 Collection of Data – Primary and Secondary sources – their comparison, methods of Collection of data
1.2.2 Concepts – Variable and Attribute (categorical variable) – Discrete, Continuous and Categorical Variables, Complete Enumeration Survey and Sample Survey, Population and Sample
1.2.3 Presentation of data – Textual, Tabular, Diagrammatic
1.2.4 Frequency Distribution – Construction of Ogives, Column diagram, Frequency Polygon, Histogram, Frequency Curve
1.2.5 Analysis of Data – Univariate and Bivariate Analysis (Concepts only)

[**References**: Gun, A. M., M.K. Gupta and B. Dasgupta (GGDG) (2022), Fundamentals of Statistics, Volume One, World Press Private Limited Kolkata – Chapter on 'Collection and Presentation of Data'; Chapter on 'Frequency Distributions']

Unit 2: Descriptive Statistics   **Lecture hours 35**

2.1 Central Tendency   **Lecture hours 10**

2.1.1 Measures of central tendency for ungrouped and grouped data – arithmetic mean, geometric mean, harmonic mean, median and mode–Composite measures; Comparison of different measures, Quartiles, Deciles and Percentiles
2.1.2 Index numbers – Price Index Numbers – problems of construction, methods of construction – aggregative (simple and weighted) and averaging price-relatives (simple and weighted), Laspayre's, Paasche's index numbers, Fisher's Index Number, Quantity Index Numbers, Tests of Index Numbers, Fixed Base and Chain Base, Wholesale price index and cost of living index, Uses of index numbers

2.2 Dispersion   **Lecture hours 10**

2.2.1 Absolute measures of dispersion for ungrouped and grouped data – range, quartile deviation, mean deviation, standard deviation –Composite SD; Comparison of different measures
2.2.2 Relative measures - coefficient of variation, coefficient of mean deviation, coefficient of quartile deviation
2.2.3 Distribution of income and wealth – Lorenz curve, Gini Coefficient, Theil's Index

2.3 Skewness and Kurtosis   **Lecture hours 5**
2.3.1 Moments – central and non-central – computation, conversion
2.3.2 Measures of skewness – Bowley's measure, coefficient of quartile deviation, measure based on moments
2.3.3 Measure of kurtosis – measure based on moments

2.4 Bivariate Analysis   **Lecture hours 10**
2.4.1 Bivariate data – scatter diagram, Simple correlation coefficient – computation, limitations, and properties

2.4.2 Simple linear regression – Least squares technique – Properties

[**Ref:** GGDG ,Volume One – Chapter on 'Measures of Central Tendency', Chapter on 'Measures of Dispersion', Chapter on 'Moments and Measures of Skewness & Kurtosis', Chapter on 'Bivariate Frequency Distributions', Volume Two – Chapter on 'Index Numbers'; Sen, A. On Economic Inequality – Chapter on 'Measures of Inequality', OUP 1973]

Additional References for Group A
1. Freund, John E., Mathematical Statistics, Prentice Hall,1992.
2. Mood, A. M., F. A. Graybill and D. C. Boes, Introduction to the Theory of Statistics, McGraw Hill, 1974.

Skill Enhancement Course (ECON-H-SEC1-1-Tu)

Introductory Statistics and Applications (I)
Marks: 25   *Credit: 1*
No. of Lecture hours (Tu): 15
[For Semester-I]

Tutorial: **15 Lecture Hours**

Mode of Tutorial Examination: Viva or presentation plus viva

Tutorial contact hours: 15 [for Revision, Doubt Clearing, Solving Problems]

- Tutorial classes are introduced per course to give the students an idea of detailed understanding of the course and also to build their confidence on the subject in terms of (i) solving problems, (ii) presenting a paper in terms of board work or power point,(iii) preparation of term paper etc.
- A **Tutorial** class also helps a teacher to clarify any topic in detail to the students.
- A **Tutorial** contact hour has been meant to promote teacher-student academic interaction.
- The norm of examination for this **Tutorial** part of the course will be **Viva, or presentation plus viva, unless otherwise mentioned.**

Introductory Statistics and Applications (II)

Marks: 25   *Credit: 1*

No. of Lecture hours (Th): 15
[For Semester-II]

Group A (Theory)

1. Basic ideas of economic data   **15 lecture hours**

1.1 Types of data-cross section, time series, pooled data, panel data etc.
1.2 Nature of field survey data – types of cross section data
1.3 Advantages and disadvantages of field survey data
1.4 Importance of field survey data for economic analysis
1.5 Role of pilot survey

Skill Enhancement Course (ECON-H-SEC2-2-P)

Introductory Statistics and Applications (II)

Marks: 75   *Credits: 3*

No. of Lecture hours (P): 45
[For Semester-II]

Group B (Practical)   **45 lecture hours**

2. Topics under worksheet Program: (Microsoft Excel)

2.1 Concept on Data Frame: **(13 lecture hours)**
(Understanding the purpose and benefits of using worksheets in data management and analysis - Familiarizing students with Microsoft Excel, and their user interface)

2.1.1 Data Entry and Formatting
2.1.2 Variables & Observations
(Inputting data into cells accurately and efficiently - Applying formatting options to enhance data presentation (e.g., number formatting, date formatting, cell borders).
2.1.3 Data Validation and Conditional Formatting (Setting validation rules to ensure data accuracy and consistency - Applying conditional formatting to highlight specific data patterns or trends.)
2.1.4 Data Sorting and Filtering (Sorting data in ascending or descending order based on specific criteria - Filtering data to display only relevant information).
2.1.5 Basic Formulas and Functions
(Understanding the concept of formulas and their role in performing calculations - Using basic mathematical operators (+, -, *, /) to create formulas - Utilizing built-in functions (e.g., SUM, AVERAGE, MAX, MIN, AND, IF, OR, COUNTIF, VLOOKUP, HLOOKUP) to perform common calculations)
2.1.6 Importing and Exporting Data (Importing data from external sources (e.g., CSV files, databases) into spreadsheets - Exporting spreadsheet data to different file formats (e.g., CSV, PDF) for sharing or further analysis).

2.2 Frequency Analysis and Data Visualization: **(12 lecture hours)**
(Creating charts and graphs to visually represent data - Selecting appropriate chart types based on data characteristics - Customizing chart elements (e.g., titles, axes, legends) to improve readability)

2.2.1 Raw Data to Group Data
2.2.2 Different type so Frequency Table

2.2.3 Different Types of Tabulation (e.g.: Two Way, Three Way, Pivot Table etc.)
2.2.4 Different Types of Frequency Graphs (Bar Chart, Column Charts, Frequency Polygon, Histogram, Pie Diagram)
2.2.5 Customization of Graphs Frame

2.3 Descriptive Statistics: **(20 lecture hours)**
(Applying descriptive statistics functions to analyze data - Calculating measures of central tendency and dispersion - Bivariate Analysis).

2.3.1 Calculation of Mean, Median & Mode (Un-Grouped & Grouped Data)
2.3.2 Dispersion & Inequality Measures (Un-Grouped & Grouped Data)
2.3.3 Findings the Observations from different Descriptive Statistical Measures with Graphics (e.g.: Box Plot, Histogram, Lorenz Curve etc.)
2.3.4 Starter Diagram - Correlation Coefficient
2.3.5 Simple Regression (Two Variables) - Estimation of Predicted Value & Regression Residuals
2.3.6 Random Number Generation

<u>Suggested Readings</u>

Microsoft Excel
1. "Mastering Data Analysis with Excel" by Michael Alexander. "Data Analysis Using Excel" by Michael Middleton; Wiley, 2020
2. "Excel Bible" by John Walkenbach; Wiley, 2019
3. "Excel Charts and Graphs: Master Data Visualization Techniques" by Paul McFedries; Wiley, 2016
4. "Excel Formulas and Functions for Dummies" by Ken Bluttman; For Dummies, 2015
5. "Microsoft Excel 2016 Step by Step" by Curtis Frye; Microsoft Press, 2015
   Weblinks:
1) MS Excel: https://www.w3schools.com/EXCEL/index.php
2) MSExcel: https://support.microsoft.com/en-au/office/excel-video-training-9bc05390-e94c-46af-a5b3-d7c22f6990bb

<u>Total Practical Hours: 45</u>

❖ Applications of use of **Microsoft Excel** software will be demonstrated in the computer laboratory in practical classes and the practical examination will be conducted in the usual manner as mentioned in CSR.
❖ To be more specific, the practical examination of the project is to be conducted jointly by the supervisor and an external examiner on the basis of the use of the **Worksheet Program** software in the computer laboratory (by determining the various measures of descriptive statistics in front of the examiners just like that of a practical examination) and also on the basis of a viva-voce based on the candidate's knowledge in this context.

Elementary Economics (ECON-H-IDC-1/2/3-Th)
Marks: 50   *Credits: 2*
No. of Lecture hours (Th): 30
[For Semester-I/ II/ III]

1**. Elementary Microeconomic Concepts**:   **10 Lecture Hours**

1.1 Theory of Demand and Supply--Determinants, Law of demand and supply, Demand and supply curves

1.2 Elasticity of Demand and Supply--Concepts of Price and income elasticity and implications

1.3 Theory of Production and Cost—Production function--Concepts of TP, AP, MP, short run-long run and different cost curves-social and external costs

1.4 Market--Different forms-TR, AR and MR-- Pricing and Output Decisions under Perfect competition and monopoly--features and equilibrium (diagrammatic representation only)

2. Elementary Macroeconomic Concepts: **10 Lecture Hours**

2.1 National Income Accounting –Circular flow-- concepts of GNP, GDP, NNP, NDP, National Income

2.2 Money and Banking--Different measures of money supply, Difference between central and commercial bank and their functions

2.3 Inflation --Definition, types and anti-inflationary policy

2.4 Fiscal Policy & Monetary Policy -Objectives and Instruments

2.5 International Trade and contemporary issues--Balance of Payments (BOP)--Concepts autonomous and accommodating transactions, Functions of IMF, World Bank, WTO Exchange Rates—PPP (Concepts only)

3. Elementary Economic Development Concepts: **5 Lecture Hours**

3.1 Growth vs. Development

3.2 Development Indicators - Human Development Index (HDI), Gender (GDI), Poverty (MPI), Inequality (GINI) Indices—India's rank

3.3 Sustainable development--concepts and Goals

4. Elementary Concepts of Indian Economics: **5 Lecture Hours**

4.1 Economic Reforms in India—Background, Basic steps of trade, industry and financial sector reforms

4.2 NITI AYOG-Structure and objectives

Elementary Economics (ECON-H-IDC-1/2/3-Tu)
Marks: 25   *Credit: 1*
No. of Lecture hours (Tu): 15
[For Semester-I/ II/ III]

Mode of Tutorial Examination: Viva or Presentation plus viva

References:

Unit-1

1. G.Mankiw. 2007, Economics: Principles and Applications, India edition by South Western, Cengage Learning

2. R.G. Lipsey. An Introduction to Positive Economics, ELBS (6th edition)

4. Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson

5. G.S.Maddala and E. Miller, 1989, Microeconomics, Prentice Hall, McGraw Hill International Editions

7. Ferguson, C.E. and Gould, J.P. : Microeconomic Theory, Aitbs Publishers and Distributors, New Delhi.

Unit-2

1. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010.

2. N. Gregory Mankiw. Macroeconomics, Worth Publishers, 2010.

3. Branson,William, Macroeconomic Theory and Policy, East West Press

4.Salvatore, D, Internaional Economics, John Wiley and sons

5. Sikdar Soumyen, Principles of Macroeconomics, Oxford University Press.

6. https://www.imf.org/en/Home

7. https://www.worldbank.org/en/home

8. https://www.wto.org/

Unit-3

1. Thirlwall, A.P, Growth and Development, Fourth Edition, ELBS

2. Todaro, M.P, Economic Development, Sixth Edition, AWL

Unit-4

1. Puri, V.K & Mishra, S.K, Indian Economy, Himalaya Publishing House

2. Dutt & Sundharam, Indian Economy, S. Chand

Microeconomics (I)

Marks: 75   **Credits: 3**

No. of Lecture hours (Th): 45

[For Semester-I]

Unit 1: Exploring the subject matter of Economics   **5 lecture hours**

1.1 Scope and Method of Economics: Wants, Scarcity, Competing Ends and Choice - Defining Economics, Thinking like an economist: Basic Economics Questions, Households and firms, Demand and Supply, Basic concepts of Utility, basic concepts of production-Production function, Definition of Average and Marginal Product, Microeconomics and Macroeconomics, Normative Economics and Positive Economics

1.2 Principles of Microeconomics – principles of individual decision making and principles of economic interactions – trade off, opportunity cost, efficiency, marginal changes and cost-benefit, trade, market economy, property rights, market failure, externality and market power.

1.3 Interdependence and the Gains from Trade- production possibilities frontier and increasing costs, absolute and comparative advantage, comparative advantage and gains from trade.

Unit 2: Utility Theory   **20 lecture hours**

(Focus on intuitive explanation and diagrams. Learning to analyze without using calculus a must)

2.1 Cardinal and Ordinal Approach.

2.2 Utility in Cardinal Approach- Utility and choice, Total Utility and Marginal Utility, Utility and choice-maximization, marginal utility, theory of demand

2.3 Ordinal utility: Assumptions on preference ordering, Indifference curve (IC), Marginal rate of substitution and convexity of IC, Budget constraint, Consumers 'equilibrium-interior and corner,

Unit 3: Demand and Supply: How Markets Work   **8 lecture hours**

3.1 Elementary theory of Demand: Factors influencing household demand and market demand, the demand curve, movement along and shift of the demand curve

3.2 Elementary theory of Supply: factors influencing supply, the supply curve, movement along and shift of the supply curve

3.3 The Elementary theory of market price: Determination of equilibrium price in a competitive market.

Unit 4: Market and Adjustments   **4 lecture hours**

4.1 The Evolution of Market Economies, Price System and the Invisible Hand

4.2 The Decision-takers - households, firms and central authorities

4.3 The Concepts of Markets- individual market, separation of individual markets, interlinking of individual

markets. Difference among markets- competitiveness, goods and factor markets, free and controlled markets. Market and non-market sectors, public and private sectors, economies- free market, command and mixed.

4.4 Different goods: Public goods, Private goods, Common resources and Natural Monopolies.

Unit 5: Market Sensitivity and Elasticity   **8 lecture hours**

5.1 Importance of Elasticity in Choice-Decisions

5.2 Method of Calculation- Arc Elasticity, Point Elasticity-definition

5.3 Demand and supply Elasticities-types of elasticity and factors affecting elasticity, Demand Elasticity and Revenue, Long run and Short run elasticities of Demand and Supply

5.4 Income and Cross Price Elasticity

5.5 Applications: Case studies – OPEC and Oil Price

<p align="center">Economics Core Course I: ECON-MD-CC1-1-Tu
Microeconomics (I)</p>

Marks: 25   **Credit: 1**
<p align="center">No. of Lecture hours (Tu): 15
[For Semester-I]</p>

Mode of tutorial Examination: Viva or Presentation plus viva

Tutorial contact hours: 15 [for Revision, Doubt Clearing, Solving Problems]

- Tutorial classes are introduced per course to give the students an idea of detailed understanding of the course and also to build their confidence on the subject in terms of (i) solving problems, (ii) presenting a paper in terms of board work or power point,(iii) preparation of term paper etc.
- A **Tutorial** class also helps a teacher to clarify any topic in detail to the students.
- A **Tutorial** contact hour has been meant to promote teacher-student academic interaction.
- The norm of examination for this **Tutorial** part of the course will be <u>**Viva, or presentation plus viva, unless otherwise mentioned.**</u>

<u>**Texts/ References:**</u>

1. G.Mankiw. 2007, Economics: Principles and Applications, India edition by South Western, Cengage Learning
2. R.G. Lipsey. An Introduction to Positive Economics, ELBS (6th edition)
3. Lipsey, R. and Chrystal, A. 2007 Economics, OUP
4. Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson
5. G.S.Maddala and E. Miller, 1989, Microeconomics, Prentice Hall, McGraw Hill International Editions

6. Karl e Case and Ray C Fair, Principles of Economics, Pearson Education, 8th Edition, 2007

7. P Samuelson and W.Nordhaus, Economics, McGraw hill International Edition (14th edition or later edition)

8. J.E.Stiglitz and C.E.Walsh, Principles of Economics, WW Norton and Company, NY, (3rd edition or later edition)

9. Hal. R Varian , Intermediate Microeconomics, A modern Approach, WW Norton and Company, 8th edition, 2010 (T)

10. Gravelle, H. and Rees,R. , Microeconomics, Prentice Hall

11. Ryan, W.J.L. and Pearce : Price Theory and Applications , Macmillan Education, UK

12. Ferguson, C.E. and Gould, J.P. : Microeconomic Theory, Aitbs Publishers and Distributors, New Delhi.

13. Satya Chakrabarty, Microeconomics, Allied Publishers

14. Gould, J.P and E.P. Lazear: Microeconomics Theory, McGraw-Hill

Economics Core Course II: ECON-MD-CC2-2-Th

Macroeconomics (I)

Marks: 75   *Credits: 3*

No. of Lecture hours (Th): 45

[For Semester-II]

1.National Income Accounting   **Lecture hours 12**

1.1 Macroeconomic data- Basic concepts of National Income accounting. The circular flow (three sector).
1.2 Concepts of GNP, GDP, NNP, and NDP at market price and at factor cost- Real and Nominal, -Implicit deflator.
1.3 The measurement of National Income. The problem of double counting.
1.4 The role of Government. Concepts of Corporate Income, Corporate Savings, Personal Income, Personal Disposable Income and Personal Savings.
1.5 Saving-Investment gap and its relation with budget deficit and trade surplus. National Income accounting and cost of living.

2. Income Determination in the Short Run (Part-I):
The Simple Keynesian Model in a Closed Economy

Lecture hours 12

2.1 Consumption Function; the Keynesian Saving Function; stability of equilibrium; the concept of effective demand- the concept of demand-determined output
2.2 Equilibrium Income determination in SKM; the Simple Keynesian Multiplier ; the paradox of thrift; the SKM in a Closed Economy with Government; Government expenditure and Tax
2.3 Balanced Budget Multiplier

3. Basic theory of Investment   **Lecture hour 3**

3.1 Investment function: Determinants of investment. -Concepts of Marginal productivity of capital
3.2 Marginal efficiency of capital (MEC) and Marginal efficiency of investment (MEI).
.
4. The Classical system   **Lecture hours 12**

4.1 Basic ideas of Classical Macroeconomics; Say 's Law and Quantity Theory of Money
4.2 Loanable fund theory
4.3 The Classical Theory of Income and Employment determination
4.4 Full Employment and wage-price flexibility; Neutrality of Money
4.5 Classical Dichotomy (Basic Concept).

5. Inflation   **Lecture hours 6**

5.1 Concepts and types - Inflationary Gap, Demand pull vs. Cost push inflation,
5.2 Anti-inflationary policy

Macroeconomics (I)

Marks: 25   *Credit: 1*

No. of Lecture hours (Tu): 15

[For Semester-II]

Mode of Tutorial Examination: Viva, or Presentation plus viva

Tutorial contact hours: 15 [for Revision, Doubt Clearing, Solving Problems]

● Tutorial classes are introduced per course to give the students an idea of detailed understanding of the course and also to build their confidence on the subject in terms of (i) solving problems, (ii) presenting a paper in terms of board work or power point, (iii) preparation of term paper etc.
● A **Tutorial** class also helps a teacher to clarify any topic in detail to the students.
● A **Tutorial** contact hour has been meant to promote teacher-student academic interaction.
● The norm of examination for this **Tutorial** part of the course will be **Viva, or presentation plus viva, unless otherwise mentioned.**

Text/ References:

1.   Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010.
2.   N. Gregory Mankiw. Principles of Macroeconomics, Indian Imprint of South Western by Cengage India, 6th edition, 2015.
3.   N. Gregory Mankiw. Macroeconomics, Worth Publishers, 2010.
4.   Ghosh Chandana and Ghosh Ambar, Macroeconomics, PHI Learning Pvt Ltd, 2014.
5.   Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2nd edition, 2005.
6.   Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc., 7th edition, 2011.
7.   Venieris, Y.P. and Sebold F.D., Macroeconomics: Models and Policy, John Wiley and Sons, 1977.
8.   Ackley Gardner (old), Macroeconomic Theory, Macmillan, 1961
9.   Ackley Gardner(new), Macroeconomics: Theory and Policy: Macmillan
10.   J.R.Hicks. The Social Framework: An introduction to Economics, Clarendon Press, 3rd Edition, 1960
11.   Sikdar Soumyen, Principles of Macroeconomics, Oxford University Press

Skill Enhancement Course [Economics: MDC (A)]
ECON-MD-SEC1 (A)-1-Th/
ECON-MD-SEC2 (A)-2-Th/
ECON-MD-SEC3 (A)-3-Th/
Name of the Course: Economic Data Analysis and Report Writing (EDARW)
Marks: 75   Credits: 3
No. of Lecture hours (Th): 45
[For Semester I/ II/ III]

1. Tabular and Graphical representation of Statistical Data   10 lecture hours
1.1 Tabular representation of data for analysis
1.2 Graphical representation of data-use of line diagram, bar chart, divided bar chart, pie chart etc.
1.3 Frequency distribution table: uses and implications
1.4 Pictorial descriptions of frequency table: frequency polygon, histogram, ogive etc.

2. Basic Descriptive Statistics and its role in Data Analysis   25 lecture hours
2.1 Measures of Central Tendency-Concept of arithmetic mean, geometric mean and harmonic mean-their uses (explicit mathematical proof of the properties of different types mean are not required).The concept of median and mode-their uses in analyzing economic data.
2.2 Comparison of mean, median and mode as measures of central tendency
2.3 Measures of dispersion: range, mean deviation, standard deviation and quartile deviation. Properties of various measures and their implications (explicit proof of properties is not required). Comparison of various measures of dispersion. Significance of the concept of coefficient of variation. Use of range, standard deviation and coefficient of variation in measuring income inequality. Basic concept of Gini coefficient and Lorenz curve.
2.4 Introductory ideas of correlation and regression analysis.

3. Elements of Report writing   10 lecture hours
3.1 Locating the basic issues- theme based literature survey and motivation behind any study- objectives of the study-development of writing skills
3.2 Methodological issues: Use of tables and graphs. Use of various measures of central tendency and dispersion in analyzing the results.
3.3 Insertion of footnotes or end notes.
3.4 Preparation of Bibliography

References
1.   Goon, A. M, Gupta, M. K, and Dasgupta, B. Fundamentals of Statistics (Volume One), The World Press Private Ltd.
2.   A.L. Nagar and R.K. Das : Basic Statistics, 2nd edition, Oxford University Press.
3.   C.R. Kothari: Research Methodology: Methods and Techniques (second revised edition), New Age India (P) Ltd Publishers.

ECON-MD-SEC1 (A)-1-Tu/
ECON-MD-SEC2 (A)-2-Tu/
ECON-MD-SEC3 (A)-3-Tu/
Name of the Course: Economic Data Analysis and Report Writing (EDARW)
Marks: 25   Credit: 1
No. of Lecture hours (Tu): 15
[For Semester I/ II/ III]

Mode of tutorial Examination: Viva or Presentation plus viva

Tutorial contact hours: 15 [for Revision, Doubt Clearing, Solving Problems]

●   Tutorial classes are introduced per course to give the students an idea of detailed understanding of the course and also to build their confidence on the subject in terms of (i) solving problems, (ii) presenting a paper in terms of board work or power point,(iii) preparation of term paper etc.
●   A **Tutorial** class also helps a teacher to clarify any topic in detail to the students.
●   A **Tutorial** contact hour has been meant to promote teacher-student academic interaction.
●   The norm of examination for this **Tutorial** part of the course will be **report writing based on item 3 (Elements of Report writing)**

Skill Enhancement Course [Economics: MDC (B)]
ECON-MD-SEC1 (B)-1-Th/
ECON-MD-SEC2 (B)-2-Th/
ECON-MD-SEC3 (B)-3-Th/
Name of the Course: Entrepreneurship and Development (ED)
Marks: 75   Credits: 3
No. of Lecture hours (Th): 45
[For Semester I/ II/ III]

1. Basic issues of Entrepreneurship and Economic Development   15 lecture hours
1.1 Basic features of Entrepreneurship
1.2 Entrepreneurship and its linkages with economic development
1.3 Growth of entrepreneurship in India—Role of Entrepreneurship in Economic
Development.
1.4 Planning Commission's guidelines for formulating a project report by an entrepreneur
1.5 Problem of Rural entrepreneurship in India

2. Financial resources for new ventures of an entrepreneur   10 lecture hours
2.1 Sources of finance---capital structure.
2.2 Institutional support to enterprises—national small industries board – state small
industries development corporation--- district industries center--- industrial estates-Indian
experience

3. Growth strategies in small business   10 lecture hours
3.1 Stages of growth,
3.2 Types of growth strategies-Expansion, Diversification, Joint Venture, Merger and
Subcontracting

4. Sickness in Small Business   10 lecture hours
4.1 Concept of industrial sickness
4.2 Symptoms of sickness in small business
4.3 Causes and consequences of sickness in small business

Skill Enhancement Course [Economics: MDC (B]
ECON-MD-SEC1 (B)-1-Tu/
ECON-MD-SEC2 (B)-2-Tu/
ECON-MD-SEC3 (B)-3-Tu/
Name of the Course: Entrepreneurship and Development (ED)
Marks: 25   Credit: 1
No. of Lecture hours (Tu): 15
[For Semester I/ II/ III]

Mode of tutorial Examination: Project Report. A student has to prepare a questionnaire comprising
10 questions and conduct interviews of 7-10 small entrepreneurs. They will prepare a project report
(around 500 words) on the basis of the outcome.

Tutorial contact hours: 15 [for Revision, Doubt Clearing, Solving Problems]

● Tutorial classes are introduced per course to give the students an idea of detailed understanding of the course and also to build their confidence on the subject in terms of (i) solving problems, (ii) presenting a paper in terms of board work or power point,(iii) preparation of term paper etc.

● A **Tutorial** class also helps a teacher to clarify any topic in detail to the students.

● A **Tutorial** contact hour has been meant to promote teacher-student academic interaction.

● The norm of examination for this **Tutorial** part of the course will be **project report preparation as mentioned above**

References
1. S.S Khanka--- Entrepreneurial Development, S.Chand & Company Ltd
2. Rajeev Roy--- Entrepreneurship, 3E , Oxford University Press
3. Bill Bolton and John Thompson ---- Entrepreneurs: Talent, Temperament and Technique, Butterworth and Heinemann.
4. David .H Holt---Entrepreneurship New Venture Creation
5. Poornima M. Charantimath: Entrepreneurship Development and Small Business Enterprises (2nd Edition) Pearson.
6. Misra D. and Puri K. Indian Economy, Himalaya Publishing House
7. Datt and Sundharam (Revised by G.Datt and A. Mahajan) , Indian Economy, 70th edition, S. Chand

<div align="center">

Interdisciplinary Course (IDC)
Elementary Economics (ECON-MD-IDC1-1-Th/ ECON-MD-IDC2-2-Th/ ECON-MD-IDC3-3-Th)
Marks: 50   *Credits: 2*
No. of Lecture hours (Th): 30
[For Semester-I/ II/ III]

</div>

1. Elementary Microeconomic Concepts: **10 Lecture Hours**

1.1 Theory of Demand and Supply--Determinants, Law of demand and supply, Demand and supply curves

1.2 Elasticity of Demand and Supply--Concepts of Price and income elasticity and implications

1.3 Theory of Production and Cost—Production function--Concepts of TP, AP, MP, short run-long run and different cost curves-social and external costs

1.4 Market--Different forms-TR, AR and MR-- Pricing and Output Decisions under Perfect competition and monopoly--features and equilibrium (diagrammatic representation only)

2. Elementary Macroeconomic Concepts: **10 Lecture Hours**

2.1 National Income Accounting –Circular flow-- concepts of GNP, GDP, NNP, NDP, National Income

2.2 Money and Banking--Different measures of money supply, Difference between central and commercial bank and their functions

2.3 Inflation --Definition, types and anti-inflationary policy

2.4 Fiscal Policy & Monetary Policy -Objectives and Instruments

2.5 International Trade and contemporary issues--Balance of Payments (BOP)--Concepts autonomous and accommodating transactions, Functions of IMF, World Bank, WTO Exchange Rates—PPP (Concepts only)

3. Elementary Economic Development Concepts: **5 Lecture Hours**

3.1 Growth vs. Development

3.2 Development Indicators - Human Development Index (HDI), Gender (GDI), Poverty (MPI), Inequality (GINI) Indices—India's rank

3.3 Sustainable development--concepts and Goals

4. Elementary Concepts of Indian Economics: **5 Lecture Hours**

4.1 Economic Reforms in India—Background, Basic steps of trade, industry and financial sector reforms

4.2 NITI AYOG-Structure and objectives

Elementary Economics (ECON-MD-IDC1-1-Tu/ ECON-MD-IDC2-2-Tu/ ECON-MD-IDC3-3-Tu**)**
Marks: 25   *Credit: 1*
No. of Lecture hours (Tu): 15
[For Semester-I/ II/ III]

Mode of Tutorial Examination: Viva or Presentation plus viva

<u>**References:**</u>

Unit-1

1. G.Mankiw. 2007, Economics: Principles and Applications, India edition by South Western, Cengage Learning

2. R.G. Lipsey. An Introduction to Positive Economics, ELBS (6th edition)

4. Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson

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