





SIES (Nerul) College of Arts, Science and Commerce (Autonomous)

M.A. Business Economics

Sr. No.	Heading	Particulars
1	Title of the course	M.A. Business Economics
2	Eligibility for admission	Any graduate
3	Minimum percentage	45%
4	Semesters	I & II
5	Level	PG
6	Pattern	02 years & 04 semesters CBGS
7	To be implemented from	From Academic year 2023-24 in a progressive manner





SIES (Nerul) College of Arts, Science and Commerce (Autonomous) (Affiliated to University of Mumbai) RE-ACCREDITED GRADE "A" BY NAAC (3rd CYCLE)

BOARD OF STUDIES SYLLABUS FOR M.A. Business Economics

(WITH EFFECT FROM THE ACADEMIC YEAR 2023-2024)

OBJECTIVES OF THE PROGRAMME:

- 1. To lay a strong foundation in economic analysis with emphasis on applications of economic principles to real life situations.
- 2. To orient students with an in-depth understanding of Microeconomic and Macroeconomic principles and practices.
- 3. To introduce a research-oriented framework for understanding practical applications of Economic concepts.
- 4. To relate economic principles with related fields such as banking, rural development and statistics.

OUTCOMES OF THE PROGRAMME:

- 1. Students will be able to describe economic concepts from a practical perspective.
- 2. Students will be able to analyze principles of Microeconomics and Macroeconomics with their relevance.
- 3. Students will be able to construct a mindset for research to understand applications of Economics.
- 4. Students will be able to discuss allied economic fields such as banking, rural development and elementary statistics.

SCHEME OF MODULES

	SEMESTER I				
Serial No	Course code	Credits	Course Name		
I		Manda	tory/ Major Courses		
1	M23BE1MJ01	04	Micro Economic Analysis		
2	M23BE1MJ02	04	Macro Economic Analysis		
3	M23BE1MJ03	04	Economics of Banking		
4	M23BE1MJ04	02	Statistics for Economics		
II			Electives		
1	M23BE1E01	04	Rural Economics		
III		Research Methodology			
1	M23BE1RM01	04	Research Methodology		
TOTAL CREDITS 22					

MICRO ECONOMIC ANALYSIS - I

COURSE CODE: M23BE1MJ01 COURSE CREDIT: 04

1 credit - 15 lectures

1 lecture is 60 minutes

Course Objectives:

- To familiarize students with the basics of Microeconomic analysis
- · To orient students with the concepts of production and costs for making business decisions.
- · To classify market structures and its impact on equilibrium and pricing strategies
- · To interpret Microeconomic theories and understand their implications.

- Students will be able to discuss the principles of Microeconomics.
- · Students will be able to demonstrate the use of cost concepts in production decisions.
- · Students will be able to categorize market structures and analyze its impact on economic decisions.
- · Students will be able to illustrate the concepts and applications of microeconomic theories.

Sr. No	Syllabus	No. of lectures
01	Module 1: Introduction and Basic Concepts Basic Economic Problem- Choice and Scarcity- Consumer preferences, opportunity sets, optimum choices, indirect utility demand functions, income and substitution effects, Slutsky equation, normal versus inferior goods, types of demand functions, elasticity, welfare evaluation, consumer surplus, equivalent variation and compensating variation, revealed preference- Concept of Equilibrium: General Equilibrium v/s Partial Equilibrium -Walrasian theory of General Equilibrium	15
02	Module 2: Production and Cost Production functions, types of production functions- Marginal products, rate of technical substitution, technical progress, cost functions, average and marginal costs, short run versus long run costs, Economies of scale and scope, Profit maximization, Cost minimization, derivation of input demand- Short Run and Long Run Cost Curve, related case studies and Numerical problems.	15
03	Module 3: Competition and Markets Assumptions of perfect market, competitive markets — demand and supply, demand and supplycurves of individual firms, short-run versus long-run, competitive market equilibrium, tax incidence analysis, price-controls and shortages- Market failure, imperfect markets- monopolistic competition and oligopoly, sources of monopoly power, monopoly market equilibrium, price discrimination — first, second and third degree, tax incidence, related case studies.	15
04	Module 4: Micro economic theories Pigou's theory of Welfare Economics — Conditions of Pareto Optimality — Bergson and Samuelson's Social Welfare Function — Arrow's Impossibility Theorem, related case studies.	15

- 1) Ahuja H. L., Advanced Economic Theory: Microeconomics Analysis, 13th Edition, S. Chand and Co. Ltd., New Delhi.
- 2) Baumol, W.J. (1982): Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.
- 3) Dewett K. K., Modern Economic Theory, S. Chand & Company Ltd., Revised Edition, 2005.
- 4) Koutsoyiannis, A. (1979): Modern Microeconomics, 2nd ed., Macmillan Press, London.
- 5) Kreps, David M (1990): A Course in Microeconomic Theory, Princeton University Press, Princeton.
- 6) Sen, A. (1999): Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
- 7) Stigler, G. (1996): Theory of Price, 4th ed., Prentice Hall of India, New Delhi.
- 8) Varian, H. (2000): Microeconomic Analysis, W.W. Norton, New York.

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 40 marks
- Semester end examination 60% i.e. 60 marks

(A) Internal Assessment 40 marks

Description	Marks
Internal tests of 20 marks each	20
Q.1. Multiple choice Questions/True or False - 10 Marks	
Q.2. Attempt 2 out of 4 questions (5 marks each)- 10 Marks	
One Project and Viva voce/Presentation/Case studies/Assignments	15
Attendance and Class behavior	5
Total	40

B) Semester end examination 60 marks

PAPER PATTERN

Duration: 2 hours	
Total Marks: 60	
Q.1 15 marks OR 15 marks	15
Q.2 15 marks OR 15 marks	15
Q.3 15 marks OR 15 marks	15
Q.4 15 marks OR 15 marks	15
Total	60
Note: 1. Q.1, 2, 3 and 4 - 15 marks question may be divided.	ed into sub questions if required.

Passing criteria: Minimum 40% in Internal (16 out of 40) and 40% (24 out of 60) in semester end examination.

MACRO ECONOMIC ANALYSIS-I

COURSE CODE: M23BE1MJ02 COURSE CREDIT: 04

1 credit - 15 lectures 1 lecture is 60 minutes

Course Objectives:

- · To familiarize students with the basics of Macroeconomic analysis
- · To acquaint students with the functioning of the economy as a whole.
- · To understand the concept of national income, social accounting and its importance.
- To orient students with Classical and Keynesian theories of income, output and employment.

- Students will be able to discuss the basics of Macroeconomics.
- Students will be able to demonstrate how the economy functions in its entirety.
- · Students will be able to illustrate the meaning, implications and importance of national income.
- · Students will be able to describe Classical and Keynesian economic theories.

Sr. No.	Syllabus	No. of lectures
01	Module 1: National Income Accounting National Income — Concept and Measurement — GDP, GNP, Different forms of national income accounting: Social accounting, flow of funds accounting and balance of payments accounting- Difficulties in the Measurement of National Income - Social Accounting Presentation of Social Accounts - Importance of Social Accounting — Difficulties in Social Accounting, related numerical problems.	15
02	Module 2: Economics of aggregates Classical Theory of Income, Output and Employment — Keynesian Theory of Income, Output and Employment — Say's Law of Market — Principles of Effective Demand — Importance of Effective Demand — Aggregate Demand and Aggregate Supply	15
03	Module 3: Demand for money and Supply of Money Classical Approach to Demand for Money — Fisher and Cambridge- Keynesian approach - Liquidity Preference Theory: Transaction, Precautionary and Speculative Demand for Money-Milton Friedman's Approach — Wealth theory- Portfolio balance Approach — Baumol and Tobin Components of money supply. Measurement of money supply- RBI Approach to Money Supply -MI, M2, M3- High Powered Money and Money Multiplier- Budget Deficits and Money Supply - Money Supply and Open Economy- Control of Money Supply	15
04	Module 4: Consumption Function Keynes psychological law of consumption — implication of the law - short- run and long-run consumption function- Empirical evidence on consumption function- Income — consumption relationship — absolute income, relative income, life cycle and permanent income hypotheses, related case studies.	15

- 1) D'Souza, Errol (2008), Macroeconomics, Pearson Education, Delhi.
- 2) Gupta R.D. and Rana A.S. (1998): Post-Keynesian Economics, Kalyani Publishers, Ludhiana.
- 3) Jha, R (1991): Contemporary Macro Economic theory and Policy, Wiley Eastern Ltd.,
- 4) Keynes, J.M (1936): General Theory of Employment, Interest and Money
- 5) Mithani D. M., Money, Banking, International trade and public finance, HimalayaPublications
- 6) Dornbusch and Fischer- "Macroeconomics"- McGraw Hill, New York, Latest Edition

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 40 marks
- Semester end examination 60% i.e. 60 marks

(A) Internal Assessment 40 marks

Description	Marks
Internal tests of 20 marks each	20
Q.1. Multiple choice Questions/True or False - 10 Marks	
Q.2. Attempt 2 questions out of 4 questions (5 marks each)- 10 Marks	
One Project and Viva voce/Presentation/Case studies/Assignments	15
Attendance and Class behavior	5
Total	40

B) Semester end examination 60 marks

PAPER PATTERN

Duration: 2 hours	
Total Marks: 60	
Q.1 15 marks OR 15 marks	15
Q.2 15 marks OR 15 marks	15
Q.3 15 marks OR 15 marks	15
Q.4 15 marks OR 15 marks	15
Total	60
Note: Q.1, 2, 3 and 4 - 15 marks question may be divided in	nto sub questions if required

Passing criteria: Minimum 40% in Internal (16 out of 40) and 40% (24 out of 60) in semester end examination.

ECONOMICS OF BANKING-I

COURSE CODE: M23BE1MJ03 COURSE CREDIT: 04

1 credit - 15 lectures

1 lecture is 60 minutes

Course Objectives:

- · To understand the role played by banks in the economy.
- · To acquaint students with commercial banking and its functions.
- · To familiarize students with the role of the Central Bank in the economy.
- · To orient students with the structure and functions of money market in India.

Course Outcomes:

- Students will be able to explain the significance of banks in the economy.
- · Students will be able to describe the role of commercial banks.
- · Students will be able to illustrate the functions of the Central Bank.
- · Students will be able to discuss the structure and role of money market in India.

Sr. No	Syllabus	No. of lectures
01	Money — Meaning, Classification and Functions- Gresham's law- Monetary standards — Metallic and paper systems of note issue- Measures of money supply and sources of reserve money in India, Brief history of Indian Rupee- Value of money - Measurement and determination	15
02	Module 2: Commercial Banking Meaning and functions of commercial banks, the process of credit creation — Purpose and limitations, Liabilities and Assets of banks- Investment policy of commercial banks- Commercial bank and economic development- Co-operative banks. A critical appraisal of the progress of commercial banking after nationalization, related case studies.	15
03	Module 3: Central Banking Functions, objectives and methods of credit control — quantitative and qualitative methods- Role and functions of Reserve Bank of India-Objectives and limitations of monetary policy of RBI- Recent Policy measures	15
04	Module 4: Indian Money Market and Banking Structure of financial market in India- Structure and functions of Indian money market including call money, treasury bills and commercial bills, weaknesses of money market in India- Money markets instruments- Development banking in India —TFCI, IDBI, and ICICI.	15

REFERENCES:

- 1) Gupta, S. B. (1983) Monetary Economics, 2/e, S. Chand & Co., New Delhi.
- 2) Mitra, S. (Ed.) (1970). Money and Banking, Random House, New York.
- 3) Savors, R. S. (1978). Modern banking, 7/e, Oxford University Press, Delhi.

- 4) Chandler, L. V. and S. N. Goldfield (1977). Economics of Money & Banking, 7/e, Harpar and Row, New York
- 5) Smith, P.F. Economics of Financial Institutions & Markets, Prentice Hall

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 40 marks
- Semester end examination 60% i.e. 60 marks

(A) Internal Assessment 40 marks

Description	Marks
Internal tests of 20 marks each	20
Q.1. Multiple choice Questions/True or False - 10 Marks	
Q.2. Attempt 2 questions out of 4 questions (5 marks each)- 10 Marks	
One Project and Viva voce/Presentation/Case studies/Assignments	15
Attendance and Class behavior	5
Total	40

B) Semester end examination 60 marks

PAPER PATTERN

Duration: 2 hours	
Total Marks: 60	
Q.1 15 marks OR 15 marks	15
Q.2 15 marks OR 15 marks	15
Q.3 15 marks OR 15 marks	15
Q.4 15 marks OR 15 marks	15
Total	60
Note: Q.1, 2, 3 and 4 - 15 marks question may be divided into sub questions if required.	

Passing criteria: Minimum 40% in Internal (16 out of 40) and 40% (24 out of 60) in semester end examination.

STATISTICS FOR ECONOMICS-I

COURSE CODE: M23BE1MJ04 COURSE CREDIT: 02

1 credit - 15 lectures

1 lecture is 60 minutes

Course Objectives:

- · To understand the interpretation of data using statistical and graphical techniques.
- · To equip students with statistical tools and concepts that help in decision making.

Course Outcomes:

- · Students will be able to interpret data using statistical tools and techniques.
- · Students will be able to employ statistical tools for business decisions.

Sr. No	Syllabus	No. of lectures
01	Module 1: Introduction to Basic Statistics	
	 Statistics: Definition, types, scope, functions and limitations - Sources and types of data; classification and techniques; Formation of frequency distribution - Diagrammatic and graphical presentation of data-Institutional arrangements for statistical data in India – Central Tendency- Meaning, Importance and Uses- Types of Measures of Central Tendency: Arithmetic Mean, Median, Mode, Harmonic Mean, Geometric Mean — The relation between Arithmetic Mean; Geometric Mean; and Harmonic Mean. Dispersion - Meaning of the Concept, Importance and Uses - Requirement Of a good- Measures of Dispersion - Types of Measures: Range & Its Co-Efficient 	
02	 Module 2: Correlation, Regression and Index Numbers Mean Deviation & Its Co- Efficient - Standard Deviation, Variance & its Co-Efficient - Lorenz Curve: 	15
	 Correlation - Methods of Studying Correlation - Karl Pearson's Coefficient of Correlation - Definition - Calculation Of Correlation For Grouped And Ungrouped Data- Interpretation OfThe Correlation Co- Efficient Spearman's Rank Correlation And Interpretation – Regression- Concept & Linear Regression - Fitting Of Lines Of Regression By The Least Squares Method Index Numbers: Meaning, And Uses, Construction And Limitations - Laspeyre's and Paasche's Index Numbers - Fisher's Idle Index Number - Cost Of Living Index Numbers. 	

REFERENCES:

- 1) Agarwal Y.P: Statistical Methods: Concepts, Applications and Computations, New Delhi: Sterling Publishers, 1988.
- 2) Allen R.G.D.: Statistics For Economics; Hutchinson & Co. Ltd. London(1949)
- 3) Blalock, Hubert M: Social Statistics, London: McGraw Hill, 1981.
- 4) Edward A.L: Statistical Methods for the Behavioral Sciences, New York: Rinchart & Co, 1954.
- 5) Garrett E: Statistical Methods for Research Worker, New York, Hafner Publishing & Co, 1950.

- 6) Grewal P.S: Methods of Statistical Analysis, New Delhi: Sterling Publishers, 1990.
- 7) Gupta C.B: An Introduction to Statistical Methods, New Delhi, Vikas Publishers, 2005.
- 8) Gupta S.P: Statistical Methods, New Delhi, Chand & Co, 2005.
- 9) Gupta. S.C: Fundamentals of Statistics, Bombay, Himalaya Publishing House, 2000.
- 10) Mansfield, Edwin: Statistics for Business and Economics, New York: Norton and Co, 1980.
- 11) S.C. Gupta And Mrs. Indira Gupta: Business Statistics: Himalaya Publishing House; Delhi(1997)
- 12) Walker H.M & Lev J: Statistical Inference, New York: Holt, 1980.

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 20 marks
- Semester end examination 60% i.e. 30 marks

(A) Internal Assessment 20 marks

Description	Marks
Internal tests of 10 marks each	10
Q.1. Multiple choice Questions/True or False - 5 Marks	
Q.2. Attempt 1 question out of 3 questions (5 marks each)- 5 Marks	
One Project and Viva voce/Presentation/Numerical Problem/Assignments	5
Attendance and Class behavior	5
Total	20

B) Semester end examination 30 marks

PAPER PATTERN

Duration: 1 hour	
Total Marks: 30	
Q.1 10 marks OR 10 marks	10
Q.2 10 marks OR 10 marks	10
Q.3 10 marks OR 10 marks Two short notes out of four for 5 marks each or numerical	10
Total	30

Note:

- Q.1, 2 10 marks question may be divided into sub questions if required.
- Q.3 May include theory (short notes) / Numerical in one of the options.

RURAL ECONOMICS-I

COURSE CODE: M23BE1E01 COURSE CREDIT: 04

1 credit - 15 lectures

1 lecture is 60 minutes.

Course Objectives:

- · To familiarize students with the nature and features of rural economy of India.
- · To acquaint students with the theories of rural development.
- · To analyze the framework of Indian agriculture and problems associated with it.
- · To understand issues related to agricultural finance and rural indebtedness.

Course Outcomes:

- · Students will be able to explain the basic characteristics of Indian rural economy.
- · Students will be able to describe rural development theories.
- Students will be able to examine the issues associated with Indian agriculture and suggest remedies for the same.
- · Students will be able to discuss problems of rural finance.

Sr. No	Syllabus	No. of lectures
01	Module 1: Rural Economy of India Nature and features of rural economy of India- Dimension, dynamics and magnitude of rural population - Concept of Rural Development, Scope of Rural Development, Causes of Rural Backwardness- Need for Rural Development, Constraints of Rural Development, examples from Indian Economy.	15
02	Module 2: Rural Dimensions Paradigms of Rural Development- Lewis Model of Economic Development, 'Big Push' theory of Development, Myrdal's thesis of 'Spread and Backwash Effects', Gandhian Model of RuralDevelopment- Rural poverty and development dimension. (Human capital, inequalities — poverty syndrome-govt. policy); Problems of rural unemployment-specially disguised unemployment causes and remedies, Livelihood approach, relevant case studies.	15
03	Module 3: Indian Agriculture Indian agriculture production system-role, problems, and gender equity, resource structure, growth opportunities; Problems of agriculture labor vis a vis mechanized agriculture and green revolution, related case studies.	15
04	Module 4: Agricultural Finance Agricultural finance and rural indebtedness — Importance, problems and sources — Govt. measures- Local Self Help Group (SHG)- Innovative credit schemes of Govt. and Non-Govt. agencies, their pros and cons- Small scale and cottage industries - Importance, problems and policy measure, related case studies.	15

REFERENCES:

- 1) B.S. Khanna, Rural Development in South Asia Vol. India, Deep and Deep Publisher
- 2) Vasant Desai, Rural Development (Vol. I-VI) in the Seventh Plan, Himalaya Publishing Co.
- 3) A.N. Agrawal, India Eco. Problem of Dev. And Planning, WISHWA Prakashan
- 4) Rakesh Hooja & P.C. Mathur, Dist & Decentralized Planning, Rawat.
- 5) Prabhu Ghate, Direct attacks on Rural Proverty-Policy, Prog. & Implementation, Concept Publishing

Company N. Delhi

- 6) Ruddar Datt & K.P.M. Sundharam, Indian Economy, S. Chand & Co. Ltd.
- 7) Amartya Sen, Resources, Value and Development., Basil Blackwell.

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 40 marks
- Semester end examination 60% i.e. 60 marks

(A) Internal Assessment 40 marks

Description	Marks
Internal tests of 20 marks each	20
Q.1. Multiple choice Questions/True or False - 10 Marks	
Q.2. Attempt 2 questions out of 3 questions (5 marks each)- 10 Marks	
One Project and Viva voce/Presentation/Case studies/Assignments	15
Attendance and Class behavior	5
Total	40

B) Semester end examination 60 marks

PAPER PATTERN

Duration: 2 hours	
Total Marks: 60	
Q.1 15 marks OR 15 marks	15
Q.2 15 marks OR 15 marks	15
Q.3 15 marks OR 15 marks	15
Q.4 15 marks OR 15 marks	15
Total	60
Note: Q.1, 2, 3 and 4 - 15 marks question may be divided in	to sub questions if required.

Passing criteria: Minimum 40% in Internal (16 out of 40) and 40% (24 out of 60) in semester end examination.

RESEARCH METHODOLOGY

COURSE CODE: M23BE1RM01 COURSE CREDIT: 04

1 credit - 15 lectures

1 lecture is 60 minutes.

Course Objectives:

- To enhance the abilities of learners to undertake research in business & social sciences.
- To enable the learners to understand, develop and apply the fundamental skills involved in the research process.
- To enable the learners to understand insights from data using statistical tools.
- To make the learners familiar with research reporting.

- Students will be able to apply research tools and techniques for practical applications.
- Students will be able to discuss and demonstrate the steps involved in the research process.
- Students will be able to interpret data using statistical tools and techniques.
- Students will be able to create research reports.

Sr. No	Syllabus	No. of lectures
01	 MODULE I: Introduction to Research Features and Importance of research, Objectives and Types of research-Basic, Applied, Descriptive, Analytical and Empirical Research. Formulation of research problem, Research Design, significance of Review of Literature Hypothesis: Formulation, Sources, Importance and Types Sampling: Significance, Methods, Factors determining sample size 	15
02	 MODULE II: Research Process Stages in Research process Data Collection: Primary data: Observation, Experimentation, Interview, Schedules, Survey, Limitations of Primary data Secondary data: Sources and Limitations, Factors affecting the choice of method of data collection. Questionnaire: Types, Steps in Questionnaire Designing, Essentials of a good questionnaire 	15
03	 MODULE III: Data Processing and Statistical Analysis Data Processing: Significance in Research, Stages in Data Processing: Editing, Coding, Classification, Tabulation, Graphic Presentation, related numerical problems. Data Analysis and Interpretation: Tools and Techniques- concepts of Measures of Central Tendency, Measures of Dispersion, Correlation Analysis and Regression Analysis in Research. Testing of Hypotheses – Parametric Test-t test, f test, z test, Non-Parametric Test -Chi square test, ANOVA, Factor Analysis, related numerical problems. Interpretation of data: significance and Precautions in data interpretation 	15

	MODULE IV: Research Reporting and Modern Practices in Research	
04	• Research Report Writing: Importance, Essentials, Structure/ layout, Types	15
	References and Citation Methods: APA (American Psychological)	
	Association), CMS (Chicago Manual Style), MLA (Modern Language	
	Association)	
	Footnotes and Bibliography	
	• Modern Practices: Ethical Norms in Research, Plagiarism, Role of	
	Computers in Research	

References:

- Kothari CR, Research Methodology- Methods and Techniques, New Wiley Ltd., 2009
- Research Methodology Text and Cases with SPSS Applications, by Dr S.L. Gupta and Hitesh Gupta, International Book House Pvt Ltd
- Business Research Methodology by T N Srivastava and Shailaja Rego, Tata Mcgraw Hill Education, Private Limited, New Delhi
- Methodology of Research in Social Sciences, by O.R. Krishnaswami, Himalaya Publishing House
- Research Methodology by Dr Vijay Upagude and Dr Arvind Shende
- Business Statistics by Dr S. K Khandelwal, International Book House Pvt Ltd
- Quantitative Techniques by Dr S. K Khandelwal, International Book House Pvt Ltd
- SPSS 17.0 for Researchers by Dr S.L Gupta and Hitesh Gupta, 2nd edition, Dr S. K Khandelwal, International Book House Pvt Ltd
- Foundations of Social Research and Econometrics Techniques by S.C. Srivastava, Himalaya publishing House
- Statistical Analysis with Business and Economics Applications, Hold Rinehart & Wrintston, 2nd Edition, New York
- Business Research Methods, Clover, Vernon T and Balsely, Howard L, Colombus O. Grid, Inc
- Business Research Methods, Emary C.Willima, Richard D. Irwin In. Homewood
- Research Methods in Economics and Business by R. Gerber and P.J. Verdoom, The Macmillan Company, New York
- Research and Methodology in Accounting and Financial Management, J.K Courtis
- Statistics for Management and Economics, by Menden Hall and Veracity, Reinmuth J.E.

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 40 marks
- Semester end examination 60% i.e. 60 marks

(A) Internal Assessment 40 marks

Description		Marks
Internal tests of 20 marks each	20	
Q.1. Multiple choice Questions/True or False - 10 Marks		
Q.2. Attempt 2 questions out of 4 questions (5 marks 6	each)- 10 Marks	

One Project and Viva voce/Presentation/Case studies/Assignments	
Attendance and Class behavior	5
Total	40

B) Semester end examination 60 marks

PAPER PATTERN

Duration: 2 hours		
Total Marks: 60		
Q.1 15 marks OR 15 marks	15	
Q.2 15 marks OR 15 marks	15	
Q.3 15 marks OR 15 marks	15	
Q.4 15 marks OR 15 marks	15	
Total	60	
Note: Q.1, 2, 3 and 4 - 15 marks question may be divided into sub questions if required.		

Passing criteria: Minimum 40% in Internal (16 out of 40) and 40% (24 out of 60) in the semester end examination.

SCHEME OF MODULES

SEMESTER II				
Serial No	Course code	Credits	Course Name	
I		Mandat	tory/ Major Courses	
1	M23BE2MJ01	04	Micro Economic Analysis II	
2	M23BE2MJ02	04	Macro Economic Analysis II	
3	M23BE2MJ03	04	Economics of Banking II	
4	M23BE2MJ04	02	Statistics for Economics II	
II	Electives (Students will choose one of the two)		ts will choose one of the two)	
1	M23BE2E01	04	Rural Economics II	
1	M23BE2E02	04	Agricultural Economics II	
III	Field Project/On-the-job Training		ect/On-the-job Training	
1		04	Field Project/ On-the-job Training	
TC	TOTAL CREDITS 22			

MICRO ECONOMIC ANALYSIS - II

COURSE CODE: M23BE2MJ01 COURSE CREDIT: 04

1 credit - 15 lectures

1 lecture is 60 minutes

Course Objectives:

- · To familiarize learners with the basics of different theories of the firm
- · To orient learners with the theories of distribution.
- · To acquaint learners with the study of Welfare Economics.
- · To examine the principles of the Economics of uncertainty.

- · Learners will be able to discuss the different models and theories of the firm.
- · Learners will be able to explain the different concepts and theories of distribution.
- Learners will be able to apply the principles of Welfare economics to solve real life problems.
- Learners will be able to analyze issues related to risk and uncertainty in the economy.

Sr. No	Syllabus	No. of lectures
01	Module 1: Theories of the firm	15
	Objectives of modern Firm- Baumol's Sales Revenue	
	Maximization Model- Williamson's Model of Managerial	
	Discretion- Marris Model of Managerial Enterprise, The Hall and	
	Hitch Report - Full Cost Pricing Rule- Bain's Limit pricing theory	
	and its recent developments including Sylos- Lobini's Model-	
	Behavioral Model of the Firm	
	Related case studies	
	Module 2: Distribution	
02		15
	Neo-Classical Approach - Marginal Productivity Theory -	
	Product Exhaustion Theorem- Technical Progress and Factor	
	Shares- Theory of Distribution under Imperfect Product and	
	Factor Markets, Macro Theories of Distribution, Ricardian, Marxian and Kalecki	
	Related case studies	
	Module 3: Welfare Economics	
03	Evioune 3. Wehate Economics	15
03	Pareto Optimal Conditions- Paretian Welfare Criterion - Value	13
	Judgment, Social Welfare Function- Compensation Principle-	
	Inability to obtain Optimum Welfare - Imperfections Market	
	Failure, Decreasing Costs, uncertainty and Non-Existent and	
	Incomplete Markets- Theory of Second Best - Arrow's	
	Impossibility Theorem, Rawl's Theory of Justice, Equity -	
	Efficiency Trade-Off.	
	Related case studies	

Module 4: Economics of Uncertainty		
04		15
	Individual Behaviour towards risk, Expected utility and certain Equivalence	
	Approaches, Risk and risk aversion, Game and Insurance, the Economics of	
	Insurance, cost and risk spreading	
	Related case studies	

- 1) Koutsoyiannis A (1985), 'Modern Micro Economics' Macmillan Press Ltd.,
- 2) Ahuja H.L. (1982), 'Advanced Economic Theory' S. Chand & company Ltd., New Delhi.
- 3) Chopra P.N (1981), 'Advanced Micro Economics' Kalyani Publications
- 4) Layard, P.R.G. and Walters, A.A. (1978). Microeconomic Theory, McGraw Hill, New York.
- 5) Little, I.M.D. (1957). Critique of Welfare Economics (2nd edition), Oxford University Press, Oxford.
- 6) Sen, A. (1999): Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
- 7) Stigler, G. (1996): Theory of Price, 4th ed., Prentice Hall of India, New Delhi.

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 40 marks
- Semester end examination 60% i.e. 60 marks

(A) Internal Assessment 40 marks

Description	Marks
Internal tests of 20 marks each Q.1. Multiple choice Questions/True or False - 20 Marks	20
Project and Viva voce/Presentation/Case studies/Assignments	15
Attendance and Class behavior	5
Total	40

B) Semester end examination 60 marks

PAPER PATTERN

Duration: 2 hours	
Total Marks: 60	
Q.1 15 marks OR 15 marks	15
Q.2 15 marks OR 15 marks	15
Q.3 15 marks OR 15 marks	15
Q.4 15 marks OR 15 marks	15
Total	60
Note: 2. Q.1, 2, 3 and 4 - 15 marks question may be divided into sub questions if required.	

Passing criteria: Minimum 40% in Internal (16 out of 40) and 40% (24 out of 60) in semester end examination.

MACRO ECONOMIC ANALYSIS-II

COURSE CODE: M23BE2MJ02 COURSE CREDIT: 04

1 credit - 15 lectures 1 lecture is 60 minutes

Course Objectives:

- · To familiarize learners with the different types of macroeconomic policies
- · To acquaint learners with the theory of inflation and trade cycle.
- · To examine the problems associated with stabilization policies.
- · To orient learners with the fundamentals of international economics.

- Learners will be able to classify and explain the different macroeconomic policies and schools of thought.
- · Learners will be able to discuss and analyze the Theory of Inflation and Trade Cycles.
- · Learners will be able to analyze the issues pertaining to policy making for economic stabilization.
- · Learners will be able to explain and apply macroeconomic principles in the context of the Open Economy.

Sr. No.	Syllabus	No. of lectures
01	Module 1: Macro Economic Policies	15
	Monetary Policy - Fiscal Policy - Income Policy - Neo-Classical Policy - Austrian Policy - The Austrian Critique of Keynesian economics - Post - Keynesian Policy and the deficit	
	Module 2: Theory of Inflation and Trade Cycle	
02	Classical Vaynasian Manatarist Approach to Inflation, Structuralism	15
	Classical, Keynesian Monetarist Approach to Inflation - Structuralism Theory - Inflation - Phillips curve Analysis - Samuelson and Solow.	
	The Natural Rate of Unemployment Hypothesis, Tobins Modified	
	Phillips Curve.	
	Related case studies	
03	Module 3: Issues in Stabilization Policies	15
	Lags in the Effects of Policy - The Role of Expectations - Uncertainty and Economic	
	Policy- Budget deficit and inflation - the mechanics of financing the budget - Income	
	Policies - Supply side economics - The Laffer Curve - Monetarism Vs. Fiscalism - The	
	Portfolio Approach - Crowding out Effect - Fine tuning or Stable Policy Setting. Related case studies	

	Module 4: Macroeconomics: From Open Economy Point of View	
04	Market for foreign exchange, devaluation and depreciation, real and nominal exchange rate, factors affecting exchange rate, Mundell-Fleming model, fixed versus floating exchange rate, price adjustment, role of fiscal and monetary policies under alternative exchange rate regimes, purchasing power parity concept. Related case studies	15

- 7) D'Souza, Errol (2008), Macroeconomics, Pearson Education, Delhi.
- 8) Gupta R.D. and Rana A.S. (1998): Post-Keynesian Economics, Kalyani Publishers, Ludhiana.
- 9) Jha, R (1991): Contemporary Macro Economic theory and Policy, Wiley Eastern Ltd.,
- 10) Keynes, J.M (1936): General Theory of Employment, Interest and Money
- 11) Mithani D. M., Money, Banking, International trade and public finance, HimalayaPublications
- 12) Dornbusch and Fischer- "Macroeconomics"- McGraw Hill, New York, Latest Edition
- 13) Rakshit, M. (1998), Studies in the Macroeconomics of Developing Countries, Oxford University Press, New Delhi

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 40 marks
- Semester end examination 60% i.e. 60 marks

(A) Internal Assessment 40 marks

Description	Marks
Internal tests of 20 marks each	20
Q.1. Multiple choice Questions/True or False - 20 Marks	
One Project and Viva voce/Presentation/Case studies/Assignments	15
Attendance and Class behavior	5
Total	40

B) Semester end examination 60 marks

PAPER PATTERN

Duration : 2 hours	
Total Marks: 60	
Q.1 15 marks OR 15 marks	15
Q.2 15 marks OR 15 marks	15
Q.3 15 marks OR 15 marks	15
Q.4 15 marks OR 15 marks	15
Total	60
Note: Q.1, 2, 3 and 4 - 15 marks question may be divided into sub questions if required.	

Passing criteria: Minimum 40% in Internal (16 out of 40) and 40% (24 out of 60) in semester end examination.

ECONOMICS OF BANKING-II

COURSE CODE: M23BE2MJ03 COURSE CREDIT: 04

1 credit - 15 lectures

1 lecture is 60 minutes

Course Objectives:

- · To orient learners with the different theories of Money.
- · To acquaint learners with the financial intermediaries in India.
- To familiarize learners with the principles, significance and role of Monetary Policy.
- · To examine the concepts related to inflation and trade cycles.

- · Learners will be able to explain the different theories of Money.
- Learners will be able to analyze the function, role and reforms related to financial intermediaries in India.
- Learners will be able to examine the monetary policy- in theory and in practice.
- · Learners will be able to explain the analyze the concepts of inflation and trade cycles.

Sr. No	Syllabus	No. of lectures
01	Module 1: Theories of Money Theories of Value of Money- Fisher, Cambridge equations, the Cash Balances Approach- Keynesian Theory of Money and Prices, The Real Balance Effect, Wicksell's contribution.	15
02	Module 2: Financial intermediaries in India The Indian commercial banking- Functions and growth of financial institutions in India - Recent reforms in banking sector in India -Non-bank financial intermediaries (NBFI's) - The currency and credit schools Role of Non-Banking financial institutions in India - Mutual funds, LIC, Investment companies, venture capital- Role of regulatory authorities - SEBI and IRDA, Financial sector reforms in India Related case studies	
03	Module 3: Monetary Policy Principles of Monetary Policy: Its meaning, objectives, frame work, targets and indicators of monetary policy; Transmission mechanism of monetary Policy- Restrictive Vs. accommodating monetary policy-Need and effectiveness of monetary policy- Lags in monetary policy-Role of monetary policy in developing countries - Monetary and credit planning - Monetarist and Keynesian views on monetary policy Related case studies	15

	Module 4: Inflation and Trade Cycle	
04		15
	Inflation Measurement and types of Inflation, Demand and Supply side	
	Inflation, Causes and effects of Inflation, Methods to Check Inflation,	
	stagflation and Anti- Inflation Policy, Inflation and Indian Economy.	
	Inflation and Unemployment- Philips curve, The Relationship between	
	Inflation and Unemployment, Long run Phillips Curve- Business Cycles	
	Meaning and Nature, Theories of trade Cycle: Schumpeter, Keynesian,	
	Samuelson and Hicks - Non- Monetary theories of business cycles	
	Related case studies	

- 6) Gupta, S. B. (1983) Monetary Economics, 2/e, S. Chand & Co., New Delhi.
- 7) Mitra, S. (Ed.) (1970). Money and Banking, Random House, New York.
- 8) Savors, R. S. (1978). Modern banking, 7/e, Oxford University Press, Delhi.
- 9) Chandler, L. V. and S. N. Goldfield (1977). Economics of Money & Banking, 7/e, Harpar and Row, New York
- 10) Smith, P.F. Economics of Financial Institutions & Markets, Prentice Hall

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 40 marks
- Semester end examination 60% i.e. 60 marks

(A) Internal Assessment 40 marks

Description	Marks
Internal tests of 20 marks each Q.1. Multiple choice Questions/True or False - 20 Marks	20
One Project and Viva voce/Presentation/Case studies/Assignments	15
Attendance and Class behavior	5
Total	40

B) Semester end examination 60 marks

PAPER PATTERN

Duration : 2 hours	
Total Marks: 60	
Q.1 15 marks OR 15 marks	15
Q.2 15 marks OR 15 marks	15
Q.3 15 marks OR 15 marks	15
Q.4 15 marks OR 15 marks	15
Total	60
Note: Q.1, 2, 3 and 4 - 15 marks question may be divided into sub questions if required.	

Passing criteria: Minimum 40% in Internal (16 out of 40) and 40% (24 out of 60) in semester end examination.

STATISTICS FOR ECONOMICS-II

COURSE CODE: M23BE2MJ04 COURSE CREDIT: 02

1 credit - 15 lectures 1 lecture is 60 minutes

Course Objective:

- To make learners aware about basic probability axioms and rules and its application and to understand the concept of conditional probability and Independence of events.
- To make learners familiar with discrete and continuous random variables as well as standard discrete and continuous distributions and to learn computational skills to implement various statistical inferential approaches.

- Learners would be able to calculate probability, conditional probability and independence and apply the given discrete and continuous distributions whenever necessary.
- Learners would be able to define null hypothesis, alternative hypothesis, level of significance, test statistic, perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases.

Sr. No	Syllabus	No. of lectures
01	Module 1: Probability Theory and Distribution	15
	 Probability: Random experiment, sample space, events types and operations of events, Probability definition: classical, axiomatic, Elementary Theorems of probability (without proof). Conditional probability, Bayes theorem (without proof), independence, Examples on Probability. Random variables (Discrete and Continuous) - Probability mass function, Probability density function and cumulative distribution function of discrete and continuous random variable, Properties of cumulative distribution function. Mathematical Expectations and Variance: Mathematical Expectations of a function, Variance and S.D of a random variable, properties. 	
	Productivity Distribution - Binomial, Poisson, Normal - definition, properties, uses, and illustrations - Chebyshev's inequality and Central Limit Theorem.	
02	Module II Sampling techniques and Hypothesis testing	15
	Census v/s. Sampling - Basic concepts of sampling, types - Random and non-random sampling techniques; Determination of sample size, characteristics - sampling and non-sampling errors. Hypothesis testing: One sided, Two sided hypothesis, critical region, Type I and Type II errors Levels of Significance. Parametric Test - Small and large sample test like tests based on t, Normal and F, Analysis of Variance Non-Parametric Test - Chi square Test, Goodness of Fit, Run Test and Median Test.	

- 13) Agarwal Y.P: Statistical Methods: Concepts, Applications and Computations, New Delhi: Sterling Publishers, 1988.
- 2) Blalock, Hubert M: Social Statistics, London: McGraw Hill, 1981.
- 3) Croxton Frederiel, Dudley J. Gowden and Sidny Klein: Applied General Statistics, New Delhi: Prentice Hall, 1975.
- 4) Edward A.L: Statistical Methods for the Behavioural Sciences, New York: Rinchart & Co, 1954.
- 5) Garrett E: Statistical Methods for Research Worker, New York, Hafner Publishing & Co, 1950.
- 6) Grewal P.S: Methods of Statistical Analysis, New Delhi: Sterling Publishers, 1990.
- 7) Gupta C.B: An Introduction to Statistical Methods, New Delhi, Vikas Publishers, 2005.
- 8) Gupta S.P: Statistical Methods, New Delhi, Chand & Co, 2005.
- 9) Gupta. S.C: Fundamentals of Statistics, Bombay, Himalaya Publishing House, 2000
- 10) Mansfield, Edwin: Statistics for Business and Economics, New York: Norton and Co, 1980.
- 11) S.C. Gupta And Mrs. Indira Gupta: Business Statistics: Himalaya Publishing House; Delhi(1997)
- 12) Walker H.M & Lev J: Statistical Inference, New York: Holt, 1980.

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 20 marks
- Semester end examination 60% i.e. 30 marks

(A) Internal Assessment 20 marks

Description	Marks
Internal tests of 10 marks each	10
Q.1. Multiple choice Questions/True or False - 10 Marks	
One Project and Viva voce/Presentation/Numerical Problem/Assignments	5
Attendance and Class behavior	5
Total	20

B) Semester end examination 30 marks

PAPER PATTERN

Duration: 1 hour		
Total Marks: 30		
Q.1 10 marks OR 10 marks	10	
Q.2 10 marks OR 10 marks	10	
Q.3 10 marks OR 10 marks Two short notes out of four for 5 marks each or numerical	10	
Total	30	
Note: Q.1, 2 - 10 marks question may be divided into sub questions if required. Q.3 May include theory (short notes) / Numerical in one of the options.		

Passing criteria: Minimum 40% in Internal (8 out of 20) and 40% (12 out of 30) in semester end examination.

RURAL ECONOMICS-II

COURSE CODE: M23BE2E01 COURSE CREDIT: 04

1 credit - 15 lectures

1 lecture is 60 minutes.

Course Objectives:

- · To familiarize learners with the economic structure of rural India.
- · To acquaint students with the rural economy and agriculture.
- · To orient learners with rural industrialization.
- · To analyze the issues pertaining to the rural economy

- · Learners will be able to explain the economic structure of rural India.
- · Learners will be able to describe and analyze rural economy and agriculture.
- · Learners will be able to examine and analyze the significance, policies and programs related to rural industrialization.
- · Learners will be able to evaluate the problems of rural economy and make recommendations for them.

Sr. No	Syllabus	No. of lectures
01	Module 1: Economic Structure of Rural India Economic Structure of Rural India: Degree of Ruralization in India, Asset Distribution, Income Distribution, Composition of rural work force. Alternative Occupations in Rural Areas: Dairying, Poultry, Fishery, Horticulture, Rural Non-Farm Sector. Related case studies	15
02	Module 2: Rural Economy and Agriculture Agriculture and Economic Development, Agricultural Development under the Plans, Organizational Aspects of Agriculture: Land Reforms, Green Revolution, Cropping Pattern, Dry Land Farming, Agriculture Finance and Marketing, Information Technology in Agriculture. Related case studies	15
03	Module 3: Rural Industrialization Rural Industrialization- Concept, Importance of Rural Industrialization, Village and Cottage Industries, Policies and Programmes for the Development of Rural Industries, Rural Industrial Sectors: Handloom, Handicrafts etc. Related case studies	15
04	Module 4: The Problems of Rural Economy Unemployment and Underemployment in Rural Areas- Problems, Causes; Poverty-Causes of Rural Poverty, Poverty alleviation programmes in India- Success and	15

Failure analysis, Poverty alleviation through Micro Finance and SHGs,
Empowerment of Rural Women through Self Help Groups, Mahatma Gandhi
National Rural Employment Guarantee Act (MGNREGA).
Related case studies

REFERENCES:

- 1) Sundaram, Satya,I.: Rural Development, Himalaya Publishing.
- 2) Desai Vasant.: Rural Development- Programmes and Strategies, Himalaya Publishing House, Mumbai
- 3) Mukundan, N.: Rural Development and Poverty Eradication in India, New Century, New Delhi
- 4) Soni, R.N.: Leading Issues in Agriculture Economics, Vishal Publishing Company
- 5) Reddy, Venkata. K.: Agriculture and Rural Development (A Gandhian Perspective), Himalaya Publishing House.

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 40 marks
- Semester end examination 60% i.e. 60 marks

(A) Internal Assessment 40 marks

Description	Marks
Internal tests of 20 marks each Q.1. Multiple choice Questions/True or False - 20 Marks	20
One Project and Viva voce/Presentation/Case studies/Assignments	15
Attendance and Class behaviour	5
Total	40

B) Semester end examination 60 marks

PAPER PATTERN

Duration : 2 hours	
Total Marks: 60	
Q.1 15 marks OR 15 marks	15
Q.2 15 marks OR 15 marks	15

Q.3 15 marks OR 15 marks	15
Q.4 15 marks OR 15 marks	15
Total	60
Note: Q.1, 2, 3 and 4 - 15 marks question may be divided into sub questions if required.	

Passing criteria: Minimum 40% in Internal (16 out of 40) and 40% (24 out of 60) in semester end examination.

ECONOMICS OF AGRICULTURE II

COURSE CODE: M23BE2E02 COURSE CREDIT: 04

1 credit - 15 lectures

1 lecture is 60 minutes.

Course Objectives:

- · To familiarize students with basics of Agricultural economics with special reference to India.
- · To acquaint students with the concepts of agricultural production.
- · To analyze agricultural pricing and marketing.
- · To evaluate the trends in Indian agriculture.

- · Learners will be able to explain the basic aspects of Agricultural economics.
- · Learners will be able to describe the principles related to agricultural production.
- · Learners will be able to appraise agricultural pricing and marketing in India.
- · Learners will be able to analyze the trends in Indian agriculture.

Sr. No	Syllabus	No. of lectures
01	Module 1: Comparative Agriculture Role of agriculture in economic development - Interdependence of agriculture and industry - Cropping pattern - Factors affecting cropping pattern. Land reforms in India - Green Revolution - Experience in Mexico, Canada and India - Farm size and productivity debate in India - Mechanization in Indian agriculture Related case studies	15
02	Module 2: Agricultural Production Farm management - Principles - Farm management decisions - Principles of factor substitution - Cost principles - Opportunity cost principle - Principles of comparative advantage -Limitations of farm management- Agricultural production functions - Factor-product relationships, Product Product relationships, Factor-factor relationships - Supply response models (Cobweb Model). Related case studies	15
03	Module 3: Agricultural Pricing and Marketing Agricultural Pricing- An evaluation of agriculture price policy in India- Pre and Post WTO situation of Indian agriculture -The Role and need for agro-based industries - The terms of trade between agricultural and non-agriculture prices; Need for state intervention; Objectives of agricultural price policy - Agricultural marketing in India - Regulated markets and cooperative marketing- Marketed and marketable surplus - Food security in India - PDS - Revamped PDS and targeted PDS - Need and objectives of agricultural price policy- International trade and agriculture	15

	development and WTO and Indian agriculture - Agriculture policy - Related case studies	
04	Module 4: The trends in Indian Agriculture	15
	Indian agriculture since independence -Pre green revolution and Post green revolution - The trends in agricultural area, production, yield, processing, marketing, trade, demand and supply of inputs, insurance - The role of Public investment and capital formation in Indian agriculture; Strategy of agricultural development. Related case studies	

- 1) A.N Sadhu & Amarjit Singh, Fundamentals of Agricultural Economics, Himalaya Publishing House.
- 2) Bilgrami, S.A.R. (1996). Agricultural Economics. Himalaya publishing House, Delhi.
- 3) Dantwala M.L. et.al (1991). Indian Agricultural Development smce Independence, Oxford &IBH, New Delhi.
- 4) Das Gupta, The new Agricultural Technology in India, Macmillan, Madras.
- 5) Gulati, A. and T. Kelly (1999), Trade Liberalization and Indian Agriculture, Oxford University press, New Delhi.
- 6) Heady E 0, Agricultural Production Function, Kalyani Publications, Ludhiana.
- 7) Kahlon, A.S. and Tyagi D.S (1983), Agriculture price policy in India. Allied publishers, New Delhi.

SCHEME OF EXAMINATION

The scheme of examination shall be divided into two parts:

- Internal assessment 40% i.e. 40 marks
- Semester end examination 60% i.e. 60 marks

(A) Internal Assessment 40 marks

Description	Marks
Internal tests of 20 marks each Q.1. Multiple choice Questions/True or False - 20 Marks	20
One Project and Viva voce/Presentation/Case studies/Assignments	15
Attendance and Class behavior	5
Total	40

B) Semester end examination 60 marks

PAPER PATTERN

Duration: 2 hours		
Total Marks: 60		
Q.1 15 marks OR 15 marks	15	
Q.2 15 marks OR 15 marks	15	
Q.3 15 marks OR 15 marks	15	
Q.4 15 marks OR 15 marks	15	
Total	60	
Note: Q.1, 2, 3 and 4 - 15 marks question may be divided into sub questions if required.		

Passing criteria: Minimum 40% in Internal (16 out of 40) and 40% (24 out of 60) in semester end examination.