

**Syllabus for
Bachelor of Arts in Economics (Honours)
Faculty of Social Science
Under Choice Based Credit System**

**Academic Session:
w.e.f. 2020-2023**



for
All Constituent/Affiliated Colleges Under
Binod Bihari Mahto Koyalanchal University,
Dhanbad

Members of Board of Studies of CBCS Under- Graduate Syllabus as per Guidelines of the Binod Bihari Mahto Koyalanchal University, Dhanbad

1. Chairman :

Dr. Ranjana Srivastava, Head, University Department of Economics, BBMKU, Dhanbad

2. External expert members:

- i) Dr. Sajal Mukherjee, Associate Professor & Head, University Department of Economics, VBU, Hazaribag
- ii) Dr. Madhumita Das Gupta, Associate Professor, University Department of Economics, Ranchi University, Ranchi

3. Members :

- i) Dr. Pushpa Kumari, Associate Professor, University Department of Economics, BBMKU, Dhanbad.
- ii) Dr. Munmun Sharan, Asstt. Professor, University Department of Economics, BBMKU, Dhanbad.

4. Invited members

- i) Dr Sanjay Prasad, Associate Profesor, G.N. College, Dhanbad
- ii) Dr. Devendra Prasad, Asst. Profesor, P.K.R.M. College, Dhanbad
- iii) Dr. Shobha Sarita, Asst. Profesor, S.S.L.N.T.M. College, Dhanbad
- iv) Dr. Mita Malkhandi, Asst. Profesor (C), S.S.L.N.T.M. College, Dhanbad.
- v) Ms. Sadhna, Asst. Profesor, G.N. College, Dhanbad

<i>Contents</i>	<i>List of Contents</i>	<i>Page No.</i>
Members of Committee		i
Contents		ii
Course structure for Undergraduate 'Honours' Programme		iv
SEMESTER I		
I. Core Course – C – 101 Introductory Micro Economics		1
II. Core course – C – 102 Money and Banking		3
III. General Elective (GE 101) of choice Elective Paper		5
IV Ability Enhancement Compulsory Course (AECC 101) Choice of Language Paper		5
SEMESTER II		
I. Core Course – C – 203 Introductory Statistics for Economics		6
II. Core Course – C – 204 Environmental Economics		8
III. General Elective (GE 202) of Choice Elective Paper		10
IV Ability Enhancement Compulsory Course (AECC 202) Environmental Science		10
SEMESTER III		
I. Core Course – C – 305 Economics of Market, Distribution and Welfare		11
I. Core Course – C – 306 Macro Economics		13
III. Core course – C – 307 History of Economic Thought		15
IV. General Elective (GE 303) of Choice Elective Paper		17
V Skill Enhancement Course (SEC 301) Choice of SEC Paper (Annexure 2)		17
SEMESTER IV		
I. Core Course – C – 408 Introductory Mathematics for Economics		18
I. Core Course – C – 409 International Economics		20
III. Core course – C – 410 Sectoral Analysis of Indian Economy		22
IV. General Elective (GE 404) of Choice Elective Paper		24
V Skill Enhancement Course (SEC 402) Choice of SEC Paper (Annexure 2)		24
SEMESTER V		
I. Core Course – C – 511 Economics of Growth and Development		25
I. Core Course – C – 512 Planning, Development and Problem of Indian Economy		27
III. Discipline Specific Elective (DSE 501 A) Matrix & Operation Research in Economy		29
(DSE 501 B) Principles of Agricultural Economics		31
(DSE 501 C) Money & Financial Markets		32
IV. Discipline Specific Elective (DSE 502 A) Advanced Statistics for Economics		35
(DSE 502 B) Industrial & Labour Economics		37
(DSE 502 C) Economics of Social Sector		39

SEMESTER VI

I. Core Course – C – 613 Public Finance	41
II. Core Course – C – 614 Human Development Dimensions and India	43
III. Discipline Specific Elective (DSE 603 A) Advanced Mathematical Economics	45
(DSE 603 B) Leading Issues in Indian Agriculture	47
(DSE 603 C) Indian Banking and Financial System	49
IV. Discipline Specific Elective (DSE 604 A) Introductory Econometrics	51
(DSE 604 B) Demography	53
(DSE 604 C) Jharkhand Economy	55

FORMAT OF QUESTION PAPER FOR END SEMESTER EXAMINATION

Format of Question Paper of End-Semester Examination (F.M 80)	57
Format of Question Paper of End-Semester Examination (F.M 40)	58

ANNEXURE I

I. Ability Enhancement Compulsory Course (AECC – 101 – SEM I)	59
II. Ability Enhancement Compulsory Course (AECC – 202 – SEM II).	67

ANNXEURE II

I. Skill Enhancement Course (SEC – 301 - SEM III)	71
II. Skill Enhancement Course (SEC – 402 - SEM IV)	75

COURSE STRUCTURE OF ECONOMICS (HONS)

Semester	Course Code	Name of Paper	Full Marks	End Semester Marks	Mid Semester (Internal) Marks
I	ECN-H-C-101-T (06 Credits, 60 Lectures& 15 Tutorials)	Introductory Micro Economics	100	80	20
	ECN-H-C-102-T (06 Credits, 60 Lectures& 15 Tutorials)	Money & Banking	100	80	20
	ECN-H-GE-101-T (06 Credits, 60 Lectures& 15 Tutorials)	Paper XYZ-H-GE-101-T as per choice of course from list in Annexure 3	100	80	20
	ECN-H-AECC-101-T Language (English/Hindi/NH+MB) (02 Credits, 30 Lectures)	Choice of Language Paper from Annexure 1	50	40	10
II	ECN-H-C-203-T (06 Credits, 60 Lectures& 15 Tutorials)	Introductory Statistics for Economics	100	80	20
	ECN-H-C-204-T (06 Credits, 60 Lectures& 15 Tutorials)	Environmental Economics	100	80	20
	ECN-H-GE-202-T (06 Credits, 60 Lectures& 15 Tutorials)	Paper XYZ-H-GE-202-T as per choice of course from list in Annexure 3	100	80	20
	ECN-H-AECC-202-T (02 Credits, 30 Lectures)	Environmental Science	50	40	10
III	ECN-H-C-305-T (06 Credits, 60 Lectures& 15 Tutorials)	Economics of Markets Distribution & Welfare	100	80	20
	ECN-H-C-306-T (06 Credits, 60 Lectures& 15 Tutorials)	Macro Economics	100	80	20
	ECN-H-C-307-T (06 Credits, 60 Lectures& 15 Tutorials)	History of Economic Thought	100	80	20
	ECN-H-GE-303-T (06 Credits, 60 Lectures& 15 Tutorials)	Paper XYZ-H-GE-303-T as per choice of course from list in Annexure 3	100	80	20
	ECN-H-SEC-301-T (Annexure-2)	Annexure – 2	50	40	10

IV	(02 Credits, 30 Lectures)				
	ECN-H-C-408-T (06 Credits, 60 Lectures& 15 Tutorials)	Introductory Mathematics for Economics	100	80	20
	ECN-H-C-409-T (06 Credits, 60 Lectures& 15 Tutorials)	International Economics	100	80	20
	ECN-H-C-410-T (06 Credits, 60 Lectures& 15 Tutorials)	Sectoral Analysis of Indian Economy	100	80	20
	ECN-H-GE-404-T (06 Credits, 60 Lectures& 15 Tutorials)	Paper XYZ-H-GE-404-T as per choice of course from list in Annexure 3	100	80	20
V	ECN-H-SEC-402-T (Annexure-2) (02 Credits, 30 Lectures)	Annexure – 2	50	40	10
	ECN-H-C-511-T (06 Credits, 60 Lectures& 15 Tutorials)	Economics of Growth & Development	100	80	20
	ECN-H-C-512-T (06 Credits, 60 Lectures& 15 Tutorials)	Planning, Development & Problems of Indian Economy	100	80	20
	ECN-H-DSE-501A-T/ ECN-H-DSE-501B-T/ ECN-H-DSE-501C-T (06 Credits, 60 Lectures& 15 Tutorials) (Choice to choose any one paper)	Matrix & Operations Research in Economics / Principles of Agricultural Economics / Money & Financial Markets	100	80	20
	ECN-H-DSE-502A-T/ ECN-H-DSE-502B-T/ ECN-H-DSE-502C-T (06 Credits, 60 Lectures& 15 Tutorials) (Choice to choose any one paper)	Advanced Statistics for Economics / Industrial & Labour Economics / Economics of Social Sector	100	80	20
VI	ECN-H-C-613-T (06 Credits, 60 Lectures& 15 Tutorials)	Public Finance	100	80	20
	ECN-H-C-614-T (06 Credits, 60 Lectures& 15 Tutorials)	Human Development Dimensions & India	100	80	20
	ECN-H-DSE-603A-T/ ECN-H-DSE-603B-T/ ECN-H-DSE-603C-T (06 Credits, 60 Lectures& 15 Tutorials) (Choice to choose any one paper)	Advanced Mathematical Economics / Leading Issues in Indian Agriculture /	100	80	20

	any one paper)	Indian Banking & Financial System			
	ECN-H-DSE-604A-T/ ECN-H-DSE-604B-T/ ECN-H-DSE-604C-T (06 Credits, 60 Lectures& 15 Tutorials) (Choice to choose any one paper)	Introductory Econometrics / Demography / Jharkhand Economy	100	80	20
Total Marks			2400	1920	480

Note:

Symbol of Paper: ECN-H-C-101-T: It is the 7th Core paper of the 3rd Semester of Economics Honours and is a Theory paper. The first three symbols in Roman capital letters indicate the subject; the next symbol H or G indicate Honours or General course; the next symbol(s) denotes Core (C), Generic Elective (GE), Discipline Specific Elective (DSE), Ability Enhancement Compulsory Course (AECC) and Skill Enhancement Course(SEC). Out of the next three digits, the first digit indicates the semester e.g. 1,2,3,4,5,6 for semester I, II, III, IV, V, VI respectively, and the next two digits indicate paper number of the particular course: C/ DSE/ GE/ AECC/ SEC . The last letter T or P indicates Theory or Practical.

SEMESTER-I

ECN-H-C-101-T	INTRODUCTORY MICRO ECONOMICS	(06 Credits, 60 Lectures)
----------------------	-------------------------------------	----------------------------------

Credits 06, Lectures 60, Tutorials 15; Marks: 20 (MSE)+ 80 (ESE) = 100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Introduction

- 1.1 Subject Matter of Economics
- 1.2 Nature and Scope of Economics: Micro and macro Economics; Positive and Normative Economics; Dynamic and Comparative Static Economics.
- 1.3 Methodology in Economics: Deductive and Inductive Methods.
- 1.4 Central Economic Problems: Scarcity and Choice; Production Possibility Frontier (PPF).

Unit 2: Consumer Behaviour

- 2.1 Cardinal Utility Analysis: Total and marginal Utility; Law of Diminishing Marginal Utility; Law of Equi-Marginal Utility; Consumer's Equilibrium.
- 2.2 Ordinal Utility Analysis: Indifference Curves; Budget Constraints; Consumer's Equilibrium.
- 2.3 Price Effect; Substitution Effect (Hicks and Slutsky); Income Effect.
- 2.4 Income Consumption Curve (ICC) and Price Consumption Curve (PCC); Normal, Inferior and Giffen Goods.
- 2.5 Consumer's Surplus: Marshall and Hicks.

Unit 3: Demand Analysis

- 3.1 Meaning of Demand; Derivation of individual Demand Curve under Cardinal and Ordinal Utility Analysis; Market demand curves for a product
- 3.2 Law of Demand; Factors Influencing Demand; Shifts in demand; Increase and decrease in demand; Engels' Curve;
- 3.3 Elasticity of Demand; Price; Income and Cross Elasticity; Factors affecting elasticity of demand.

Unit 4: Theory of Production

- 4.1 Production Function: Short Run and Long Run.
- 4.2 Law of Variable Proportions
- 4.3 Returns to Scale; Economies of Scale.
- 4.4 Cobb-Douglas Production Function: It's Properties.
- 4.5 Isoquant Analysis; Iso-Cost Line; Producer's Equilibrium.

Suggested Readings:

1. Karl E. Case and Ray C Fair, Principles of Economics, Pearson Education Inc.
2. N. Gregory Mankiw, Economics: Principles and Applications, Centage Learning India Private Limited.
3. Joseph E. Stieglitz and Carl E. Walsh, Economics, WW. Norman & Company.
4. C. Snyder and W. Nicholson, Fundamentals of Micro Economics, Cengage Learning, India.
5. B. Douglas Bernheim and Micgael D. Winston, Micro Economics, Tata McGraw Hill, India.
6. Alfred W. Stonier and Douglas C. Hague, A Textbook of Economic Theory ,E L B S and Longman Gr. Ltd.
7. H.L. Ahuja, Advanced Economic Theory, S. Chand Publication, New Delhi
8. M.L.Seth, Micro Economics, Lakshmi Narayan Publication , Agra.

SEMESTER-I

ECN-H-C-102-T	MONEY AND BANKING	(04 Credits, 60 Lectures)
---------------	-------------------	---------------------------

Credits 06, Lectures 60, Tutorials 15; Marks: 20 (MSE)+ 80 (ESE) = 100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1. Money

- 1.1 Meaning and functions of money. Concept of money in a modern economy;
- 1.2 Role of money in Capitalistic, Socialistic and Mixed Economies.
- 1.3 Determination of demand for and supply of money.
- 1.4 Quantity theory of money: Cash - Transactions approach and Cash - Balance approach;
- 1.5 Keynesian theory of money and prices; Liquidity preference and rate of interest.

Unit 2. Inflation & Multiplier

- 2.1 Inflation Concept; Demand-pull and Cost-push inflation; Concept of Inflationary Gap;
- 2.2 Effects of inflation;
- 2.3 Measures to control inflation;
- 2.4 Phillips curve.
- 2.5. MPC, APC, MPS, APS & Keynesian Investment Multiplier.

Unit 3. Central Banking

- 3.1 Objectives, Functions of Central Bank; Limitations of Central Bank with reference to RBI
- 3.2 Supply of Money: Concept, Components and Aggregates
- 3.3 Money Multiplier
- 3.4. Quantitative and Qualitative Methods of Credit Control.

Unit 4. Commercial Banking

- 4.1 Meaning ,Type , Functions and Principles of Commercial Banks

4.2 Structure and Balance Sheet of a Commercial Bank; Assets and Liabilities.

4.3 Process of Credit Creation

4.4 Commercial Banking in India: Evaluation of Banking Sector since Independence; Critical Appraisal of Commercial Banking after Nationalisation; Reforms in the Banking Sector

Unit 5. Financial Markets

- 5.1 Meaning and Role of Financial Markets; Meaning and Difference between Money and Capital Markets.
- 5.2 Objectives, Functions and Limitations of Money Market; Money markets in Developing economies with Special reference to India.
- 5.3 Instruments of Money Market: Certificate of Deposit Commercial Paper , Call Money, Treasury Bills,
- 5.4 Types of Market: Stock Market, Bond Market , Commodity Market , Derivatives Market

Suggested Readings:

- 1. The Economics of Money , Banking and Financial Markets- Frederic S Mishkin (Pearson)
- 2. A Treatise on Money- J M Keynes
- 3. Financial Markets, Banking and Monetary Policy- Thomas D Simpson
- 4. Monetary Economics- Institutions, Theory and Policy- T.T. Sethi (S.Chand& Company)
- 5. Monetary Economics- M.L.Seth Hn. Ed. (Lakshmi Narayan Agarwal, Agra)
- 6. Financial Stability Report- RBI
- 7. Monetary Policy Report- RBI

SEMESTER-I

ECN-H-GE-101-T	Paper XYZ-H- GE-101-T as per choice of course from list in Annexure 3	(04 Credits, 60 Lectures)
----------------	---	---------------------------

Students must choose a course XYZ out of the courses offered in Annexure 3. They shall study one paper as a GE paper of that course in Semesters I, II, III and IV as offered by that course.

Credits 06, Lectures 60, Tutorials 15

Marks: 20 (MSE)+ 80 (ESE)=100

Pass Marks: (MSE:08+ ESE: 32)= 40

SEMESTER-I

ECN-H-AECC-101-T	CHOICE OF LANGUAGE PAPER	(02 Credits, 30 Lectures)
------------------	--------------------------	---------------------------

Students must choose one Language course out of the list of courses in Annexure 1

Credit Theory 02), Theory-30 Lectures

Marks:10(MSE) +40 (ESE) =50.

Pass Marks: (MSE:04 + ESE: 16) =20

SEMESTER-II

ECN-H-C-203-T	INTRODUCTORY STATISTICS FOR ECONOMICS	(06 Credits, 60 Lectures)
---------------	---------------------------------------	---------------------------

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid

Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1 : Introduction to Statistics

- 1.1 Definition and Scope of Statistics
- 1.2 Collection of Data – Primary and Secondary Data ; Methods of collecting Primary and Secondary Data
- 1.3 Methods of Collecting Primary Data – Census and Sampling Methods; Methods of Sampling
- 1.4 : Classification and Tabulation of Data
- 1.5 Presentation of Data - Tabular ; Diagrammatic and Graphic

Unit 2: Univariate Analysis

- 2.1 Measures of Central Tendency – Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic Mean
- 2.2 Measures of Dispersion – Range, Mean Deviation, Standard
- 2.3 Deviation, Coefficient of Variation and Quartile Deviation
- 2.4 Skewness and Kurtosis

Unit 3:Bivariate Analysis

- 3.1 Correlation – Definition; Types; Karl Pearson and Rank Correlation
- 3.2 Coefficient; Properties of Correlation
- 3.3 Regression – Lines of Regression; Least Squares Method and
- 3.4 Interpretation of Regression Coefficients

Unit 4: Time Series and Index Numbers

- 4.1 Time Series Analysis – Concept; Component; Trend Line and Trend
- 4.2 Values by Least Squares Method
- 4.3 4.2: Index Numbers -Concept; Price relative; Quantity relative; Weighted Index Numbers; Problems in the Construction of Index Numbers and Limitations of Index Numbers
- 4.4 Methods of Construction of Index Numbers –Laspeyre, Paasche, Fisherand Consumer Price Index
- 4.5 Tests for Adequacy of Index Number – Time Reversal Test & Factor, Reversal Test

Unit 5: Probability

- 5.1 Basic Concepts – Random Experiments, Sample Space and Events
- 5.2 Definition of Probability – Classical, Statistical and Axiomatic
- 5.3 Rules of Probability – Addition and Multiplication Theorem; Bayes Theorem

Suggested Readings:-

- 1. Statistics For Economics , N.M. Shah, Arya Publications
- 2. Schaum's Outline of Theory and Problems of Statistics , Murray R. Spiegel, Larry J. Stephens , Tata McGraw –Hill Edition
- 3. Basic Statistics , B.L.Agarwal, New Age International Publishers
- 4. Quantitative Techniques (Hindi Edition) , Dr. B.N. Gupta , SBPD Publication
- 5. Business Statistics , V.C. Sinha and Alok Gupta , SPBD Publication
- 6. Fundamentals of Statistics , S.C. Gupta , Himalaya Publishing House

SEMESTER-II

ECN-H-C-204-T	ENVIRONMENTAL ECONOMICS	(06 Credits, 60 Lectures)
---------------	-------------------------	---------------------------

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1 : Introduction

- 1.1 Meaning and Scope of Environmental Economics.
- 1.2 Meaning and characteristics of Environmental goods.
- 1.3 Renewable and Non-renewable resources.
- 1.4 Common Property Resources.
- 1.5 Economic Development & Environment- Two Way Linkage

Unit 2: Environmental Externalities

- 2.1 Externalities and market failure; Negative &Positive Externalities.
- 2.2 Pareto Optimality and market failure in the presence of externalities.
- 2.3 Pigouvian taxes and subsidies.
- 2.4 Sustainable Development- concept and indicators.

Unit 3: Environmental Issues

- 3.1 Environmental Degradation- Land, Forest and Natural Resource degradation;
- 3.2 Causes, Effects and Solutions to Environmental Degradation.
- 3.3 Problems of Pollution- Air & Water Pollution.

Unit 4: Environmental Policies

- 4.1 National Environment Policy.
- 4.2 National Water Policy.
- 4.3 National Forest Policy.
- 4.4 WTO & The Environment.
- 4.5 Climate Change and International Agreements.
- 4.6 Green GDP; Carbon Foot Print; Environmental Green Accounting.

Suggested Readings-

1. Ganesa murthy, V.S. Environmental Economics in India, New Centuary Publication
2. Bhattacharya, R.N. Environmental Economics-An Indian Perspective, Oxford University Press
3. T.Eugene, Environmental Economics,Yrinda Publication
4. Baumal,W.J. &W.E.Oates, The Theory of Environmental Policy, Cambridge University Press
5. Charles D. Kolstad, Intermediate Environmental Economics, Oxford University Press
6. N. Hanley ,Jason F, & Shogren, Environmental Economics in theory and practice, Macmillan Education UK
7. Awashti N. M, Paryavaran Adhyayan (Hindi), Laxmi Narayana Agarwal,Agra
8. Muhtukrishnan Subhashini, Economics of Environment, Mediamatics

SEMESTER-II

ECN-H-GE-202-T	Paper XYZ-H-GE-202-T as per choice of course from list in Annexure 3	(06 Credits, 60 Lectures)
----------------	--	---------------------------

Students must choose a course XYZ out of the courses offered in Annexure 3. They shall study one paper as a GE paper of that course in Semesters I, II, III and IV as offered by that course.

Credits 06, Lectures 60, Tutorials 15

Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

(See Annexure 2 for choice of course offered)

SEMESTER-II

ECN-H-AECC-202-T	ENVIRONMENTAL SCIENCE	(02 Credits, 30 Lectures)
------------------	-----------------------	---------------------------

This is a compulsory course in Ability Enhancement and common to all Courses of all Faculties in the University.

ENVIRONMENTAL SCIENCE

Credit Theory 02), Theory-30 Lectures

Marks:10(MSE) +40 (ESE) =50.

Pass Marks: (MSE:04 + ESE: 16) =20

(See Annexure 1 for Syllabus on Environmental Science).

SEMESTER-III

ECN-H-C-305-T	ECONOMICS OF MARKETS DISTRIBUTION & WELFARE	(06 Credits, 60 Lectures)
---------------	---	---------------------------

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Market Structures & Equilibrium under Perfect Competition & Monopoly

- 1.1 Forms of Market: Perfect and Imperfect Markets; their Salient Features.
- 1.2 Equilibrium of the Firm and Industry (Short Run and Long Run) under Perfect Competition; Derivation of Supply Curve of a firm in different cost conditions.
- 1.3 Monopoly: Meaning; Price and Output Determination (Short Run and Long Run); Price Discrimination

Unit 2 : Equilibrium under Monopolistic Competition & Duopoly

- 2.1 Monopolistic Competition: Meaning & Characteristics; Price and Output Determination (Individual and Group Equilibrium); Importance of Selling Costs.
- 2.2 Duopoly: Meaning and Characteristics; Non-Collusive Cournot model
- 2.3 Oligopoly: Meaning & Characteristics, Kinked Demand Curve Theory.

Unit 3: Input Markets & Factor Pricing

- 3.1 Input Demand-Derived Demand; Input Demand Curve of a Firm under Perfect and Imperfect Markets.
- 3.2 Marginal Productivity Theory of Distribution; Adding-Up Problem (Euler's Theorem).
- 3.3 Theories of Wage determination: Demand and Supply Theory; Collective Bargaining.
- 3.4 Rent: Ricardian and Modern Theory.
- 3.5 Interest: Classical and Keynesian Theories.
- 3.6 Profit: Innovation, Risk and Uncertainty Theories.

Unit 4: Welfare Economics

- 4.1 Concept of Welfare: Value Judgement; Problems in Measuring Welfare.
- 4.2 Classical Welfare Economics: Pigou – Marginal Social and Marginal Private Net Costs & Products; Externalities and Welfare Maximisation.
- 4.3 Pareto's Criterion of Measuring Welfare; Pareto Optimality
- 4.4 Compensation Criteria- Hicks, Kaldor and Scitovsky

Suggested Readings:

- 1. Karl E. Case and Ray C Fair, Principles of Economics, Pearson Education Inc.
- 2 N. Gregory Mankiw, Economics: Principles and Applications, Centage Learning India Private Limited.
- 3. Joseph E. Stieglitz and Carl E. Walsh, Economics, WW. Norman & Company.
- 4. C. Snyder and W. Nicholson, Fundamentals of Micro Economics, Cengage Learning, India.
- 5 B. Douglas Bernheim and Michael D. Winston, Micro Economics, Tata McGraw Hill, India.
- 6 Alfred W. Stonier and Douglas C. Hague, A Textbook of Economic Theory, E L B S and Longman Gr. Ltd.
- 7 H.L. Ahuja, Advanced Economic Theory, S. Chand Publication, New Delhi
- 8 M.L.Seth, Micro Economics, Lakshmi Narayan Publication, Agra.

SEMESTER-III

ECN-H-C-306-T	MACRO ECONOMICS	(06 Credits, 60 Lectures)
---------------	-----------------	---------------------------

Credits 06, Lectures 60, Tutorials 15Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :-

Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1.National income accounting

- 1.1 Concept of circular flow; concepts of GDP and national income; national income and its related aggregates;
- 1.2 Measurement of national income; nominal and real income; limitations of GDP concept.
- 1.3 Concept of social accounting. Environmental concerns in national income; Concept of green accounting.

Unit 2.Theory of output and employment

- 2.1 Say's law of market and Classical theory of employment: critical analysis and Keynes' objections.
- 2.2 Principle of Effective Demand: Equality and Equilibrium of Aggregate Demand (AD) and Aggregate Supply (AS); Paradox of Thrift.
- 2.3 Consumption Function and Savings Function: APC and MPC; APS and MPS; Factors affecting Consumption Function; Psychological law of consumption
- 2.4 Investment Function: Autonomous and Induced Investment; MEC and Rate of Interest.
- 2.5 Investment Multiplier and its Effectiveness in Less Developed Countries.
- 2.6 Theory of Acceleration

Unit 3. Trade Cycles

- 3.1 Nature and characteristics of Trade Cycle

- 3.2 Hawtrey's Monetary Theory of Trade Cycle
- 3.3 Hayek's Over-Investment Theory of Trade Cycle.
- 3.4 Keynesian Views on Trade Cycle

Unit 4. Fiscal and Monetary Policy

- 4.1 Fiscal Policy target and instruments
- 4.2 Monetary Policy objectives, target and instruments

Unit 5: Simple Income Determination Model in a closed economy

- 5.1 Keynesian and Classical Models
- 5.2 IS -LM income and interest determination.

Suggested Reading:

1. 1.Keynes and Post- Keynesian Economics- R.D. Gupta , Kalyani Publishers, New Delhi
 2. Macro Economic Theory and Policy - William H. Branson, A.I.T.B.S. Publishers, New Delhi
 3. Macro Economic Analysis - Edward Shapiro, Galgotia Publications, New Delhi
 4. Money &Banking : Theory with Indian Banking - T. N .Hajela , Ane Books India
 5. Macro Economic Analysis - K.C.Rana&K.N.Verma, Vishal Publishing House, Jalandhar
 6. N, Gregory Mankiw, macroeconomics, Wooth Publishers, 7th edition, 2010.
 7. Olivier Blanchaed, macroeconomics, Pearson Education, Inc., 5th edition, 2009.
 8. Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Educations, Inc., 7th edition, 2011
-

SEMESTER-III

ECN-H-C-307-T	HISTORY OF ECONOMIC THOUGHT	(06 Credits, 60 Lectures)
---------------	-----------------------------	---------------------------

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Early Period

1.1 Mercantilism.

1.2 Physiocracy.

Unit 2: Development of Classical Economics

- 2.1 Adam Smith: Division of Labour, Theory of Value, Capital Accumulation, Distribution, Views on Trade, Economic Progress.
- 2.2 David Ricardo: Value, Theory of Rent, Distribution, Ideas on Economic Development and International Trade.
- 2.3 T.R. Malthus: Theory of Population, Theory of Gluts.
- 2.4 Karl Marx: Dynamics of Social Change, Theory of Value, Surplus Value, Profit and Crisis of Capitalism.

Unit 3: The Marginalist Revolution

- 3.1 Jevons and Walrus.
- 3.2 Neo-Classical Thought: Alfred Marshall.

Unit 4: The Keynesian Revolution

- 4.1 Historical Bckground of Keynesian Revolution and the Great Depression.
- 4.2 Economic Ideas of J. M. Keynes – Under Employment Equilibrium, Inflation, Role of Monetary Policy.

Unit 5: Indian Economic Thought

- 5.1 Economic ideas of Kautaliya
- 5.2 Economic Ideas of Mahatma Gandhi.
- 5.3 Economic Ideas of Amartya Sen
- 5.4 Economic ideas of Abhijit Banerjee

Suggested Readings-

1. R. Black house, History of modern economic analysis (Basil black well oxford)
2. J.R. Hicks, Value and capital and growth (London press Oxford)
3. B.N.L. Ganguli, Indian economic thoughts
4. T.N. Hazella, Arthik Vicharon Ka Itihas, Ane Books Pvt. Ltd.
5. TN. Hazella, History of Economics, Ane Books Pvt. Ltd.
6. Abhijit V.Banerjee & Esther Buflo, Poor Economics, Public Affairs
7. Amiya Kumar Dasgupta, A History of Indian Economic Thought, Oxford University Press
8. M.L. Jhngan, History of Economic Thought, Vrinda Publication

SEMESTER-III

ECN-H-GE-303-T	Paper XYZ-H-GE-303-T as per choice of course from list in Annexure 1	(06 Credits, 60 Lectures)
----------------	--	---------------------------

Students must choose a course XYZ out of the courses offered in Annexure 3. They shall study one paper as a GE paper of that course in Semesters I, II, III and IV as offered by that course.

Credits 06, Lectures 60, Tutorials 15

Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

SEMESTER-III

ECN-H-SEC-301-T	See Annexure 2	(02 Credits, 30 Lectures)
-----------------	----------------	---------------------------

This is The first of the two compulsory Skill Enhancement paper for all students .

Credit Theory 02), Theory-30 Lectures

Marks:10(MSE) +40 (ESE) =50.

Pass Marks: (MSE:04 + ESE: 16) =20

(For choice of paper and Syllabus, see Annexure 2)

SEMESTER-IV

ECN-H-C-408-T	INTRODUCTORY MATHEMATICS FOR ECONOMICS	(06 Credits, 60 Lectures)
---------------	--	---------------------------

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Basic Concepts

- 1.1 Set Theory: Concept; Types; Set operations; Use of Venn Diagrams
- 1.2 1.2: Functions: Concept; Types of Functions and its Graphs.
- 1.3 1.3: Equations: Concept; System of Equations; Economic Application of Equations
- 1.4 Elements of Coordinate Geometry: Straight Line

Unit 2: Limit and Differentiation

- 2.1 Limit: Concept; Rules
- 2.2 Differentiation: Nature; Rules; Techniques of Simple differentiation.
- 2.3 Maxima and Minima: First Order and Second Order Conditions; Point of Inflexion; Application of Maxima and Minima in Economics : Equilibrium of the Firm under Perfect Competition and Monopoly
- 2.4 Inter-Relationships among Total, Marginal and Average Cost and Revenues.

Unit 3: Integration

- 3.1 3.1: Integration of a Function: Concept and Rules of Integration; Definite and Indefinite Integrals.
- 3.2 Economic Application of Integrals: Obtaining Total Function from Marginal Function of Revenue, Cost and Product.

Unit 4: Matrix and Determinants

- 4.1 4.1: Various Types of Matrices.
- 4.2 Matrix Operations.
- 4.3 Determinants.
- 4.4 Inverse of a Matrix, Rank of Matrix
- 4.5 Cramer's Rule for Solution of Linear Non-homogenous Equation System

Suggested Readings-

- 1) Mathematical Analysis for Economics, R.G. D. Allen. , All India Publishers and Distributors
- 2) Introduction to Mathematical Economics , Edward T. Dowling , McGraw Hill
- 3) Elementary Mathematics in Economics , Mehta &Madnani, Lakshmi Narain Agarwal
- 4) Mathematical Economics (Hindi Edition) , Dr. J.P. Mishra, Sahitya Bhawan Publications
- 5) Mathematical Methods for Economics – I (IGNOU), SCP Panel of Experts, Shri Chakradhar Publication Pvt. Ltd.

SEMESTER-IV

ECN-H-C-409-T	INTERNATIONAL ECONOMICS	(06 Credits, 60 Lectures)
---------------	-------------------------	---------------------------

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Scope of International Economics

- 1.1 International Economics: Definition, Nature and Importance.
- 1.2 Gains from Trade: Their Measurement and Distribution.
- 1.3 Absolute Cost Advantage; Comparative Cost Advantage (Ricardian); Heckcher -Ohlin Theory of International Trade.

Unit 2: International Trade Policy

- 2.1 2.1: Free Trade vs. Protection.
- 2.2 Methods of Trade Restriction: Tariff- Types, Optimum Tariff, Impact of Tariff in partial equilibrium analysis; Quotas- Types, Their impact in partial equilibrium analysis

Unit 3: Foreign Exchange

- 3.1 Exchange Rate Determination: Gold Standard (Mint Parity); Purchasing Power Parity Theory.
- 3.2 Devaluation and Appreciation of Currency& impact on International Trade.

Unit 4: Balance of trade and Balance of Payment

- 4.1 Concepts and Components of Balance of Trade and Balance of Payment.
- 4.2 Equilibrium and Disequilibrium in Balance of Payment; Consequences of Disequilibrium in Balance of Payment; Measures to Correct Deficit in the Balance of Payments.

Unit 5: International Financial Institutions and India

- 5.1 5.1: Functions of IMF; World Bank; WTO with reference to India.
- 5.2 Need and Importance of Foreign Capital in Developing Economies.

Suggested Readings-

1. J.Bhagwati, International Trade, Cambridge Univ. Press
2. M.L. Verma, International Trade, Vikas Pub. Press
3. S.K. Singh, International Monetary System – Trends & Issues, Indus Publishing Company
4. H.G. Mannur, International Economics, Vikas publication
5. Paul R Krugman, International Economics- Theory and Practice, Pearson Publication
6. D. Salvatore, International Economics, Wiley India
7. Sachdeva, International Economics, Vikas Bharati Publication
8. Vaishya & Sachdeva Singh - Antarashtriya Arthshastra, Oxford & IBH Com.
9. M.L. Jhingan, Antarrashtriya Arthshashtra, Vikas Publication.

SEMESTER-IV

ECN-H-C-410-T	SECTORAL ANALYSIS OF INDIAN ECONOMY	(06 Credits, 60 Lectures)
---------------	-------------------------------------	---------------------------

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Framework of Indian Economy and Its Problems

- 1.1 Nature of the Indian Economy – India as a Developing Economy
- 1.2 Trends and Growth of Indian Economy.
- 1.3 Poverty: Causes, Remedial Measures, Multi-dimensional Poverty index.
- 1.4 Problem of Unemployment, solutions and Government Initiatives.

Unit 2: Population and human Development

- 2.1 India's Population: Size, and Growth Trends
- 2.2 The Three Stage of Demographic Transition
- 2.3 Population and Economic Development, Remedies for Rapid Growth of Population.
- 2.4 Essential Component of Human Development, Why Human Development, Health and Malnutrition.

Unit 3: Basic Issues in Agriculture

- 3.1 Role of Agriculture in Indian Economy, Trend in Agriculture Production and Productivity, Cropping Pattern in India.
- 3.2 Green revolution, Impact of Green Revolution.
- 3.3 New Agriculture Policy in India, Trend in Agricultural prices.
- 3.4 The Problem of Food Security, National Food Security Act.

Unit 4: The Industrial Sector

- 4.1 Trends in Industrial Production, Problems os Industrial Development in India.
- 4.2 The Role and Performance of Small and Cottage Industries in Indian Economy.
- 4.3 Performance of the Public Sector.

- 4.4 New Industrial Policy, Appraisal of New Industrial Policy, The disinvestment Programme in India, Corporate Social Responsibility.

Unit 5: India's foreign trade

- 5.1 Composition of Foreign Trade, direction of Trade.
5.2 India's Balance of Payment- Balance of Payment Situation since 1991, Challenges and outlook.
5.3 Foreign Trade Policy, Need for Foreign Capital, Foreign Investment Inflows.

Unit 6: Some Recent Initiative development-

- 6.1 Make in India, Startup India, Skill development, Jan Dhan Yojana, National Rural Livelihood Mission, MNREGA.

Suggested Readings-

1. Bhagawati, J (2012): Reform and Economic Transformation in India.
2. Brahmananda, P.R. and Panchmukhi, V.R. (2001) : Development Experience in Indian Economy: Inter State Perspective, Bookwell , Delhi.
3. Goyal, Ashima (2015): A Concise Handbook of Indian Economy in the 21st century.
4. Dantwala, M.L. (1996): Dilemmas of Growth The Indian Experience, Oxford University Press, New Delhi.
5. Puri, V.K. and Mishra, S.K. (2018): Indian Economy, Himalaya Publishing House.(Hindi/English)
6. Dutt, R. and Mahajan, B.D. (2018): Indian Economy, S. Chand Publications, New Delhi. (Hindi/English)
7. Yojana(Hindi/English)- A Monthly Magazine.
8. Kurukshetra (Hindi/English)- A Monthly Journal of Rural Development.
9. Economic Survey, Govt. of India (Hindi/English)

SEMESTER-IV

ECN-H-GE-404-T	Paper XYZ-H-GE-404- T as per choice of course from list in Annexure 3.	(06 Credits, 60 Lectures)
----------------	--	---------------------------

Students must choose a course XYZ out of the courses offered in Annexure 3. They shall study one paper as a GE paper of that course in Semesters I, II, III and IV as offered by that course.

Credits 06, Lectures 60, Tutorials 15

Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

SEMESTER-IV

ECN-H-SEC-402-T	See Annexure 2	(02 Credits, 30 Lectures)
-----------------	----------------	---------------------------

This is the second of the two compulsory Skill Enhancement paper for all students. (See Annexure 2 for choice of course and Syllabus)

Credit Theory (02), Theory-30 Lectures Marks:10(MSE) +40 (ESE) =50.

Pass Marks: (MSE:04 + ESE: 16) =20

SEMESTER-V

ECN-H-C-511-T	ECONOMICS OF GROWTH AND DEVELOPMENT	(06 Credits, 60 Lectures)
---------------	-------------------------------------	---------------------------

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1 : Concept of Growth and Development

- 1.1 Concept of Economic Growth and Economic Development, Measures of Economic Growth; Indicators of Economic Development, Factors affecting Growth and Development
- 1.2 Distinction between Economic Growth and Development, Main obstacles to Economic Development
- 1.3 Measures of Development : HDI, GDI, GEM, International Comparison with reference to India.

Unit 2 : Growth Models

- 2.1 The Harrod-Domar Model
- 2.2 Kaldor Model of Growth
- 2.3 Solow Model
- 2.4 The Mahalanobis Model
- 2.5 Feldman Model

Unit 3 : Leading Issues in Poverty, Inequality and Development

- 3.1 Meaning of Poverty; Absolute & Relative Poverty; Characteristics of Poverty.
- 3.2 Measurement of Poverty : Income based measures and Poverty Line, Non-monetary Measures (PQLI)
- 3.3 Poverty Traps in Developing Nations; Factors contributing to Vicious Circle of Poverty
- 3.4 Concept of Economic Inequality, Criteria of Economic Inequality;
- 3.5 Measurement of Inequality : The Lorenz Curve; GINI Coefficient

Unit 4 : Macro Economic Policy & Economic Development

- 4.1 Role of Monetary Policy in Promoting Economic Development.
- 4.2 Fiscal Policy and Economic Development

4.3 External Resources in Development : FDI, Aid versus Trade; Technology Inflow; MNC and Economic Growth.

Suggested Readings-

1. Ray, Debraj- Development Economics, Oxford University Press
1. Meir, G.M.-Leading Issues in Economic Development
3. Basu- Analytical Development Economics
4. Amartya Sen- Development as freedom, Oxford University Press,2000
5. Lekhi,R K , Joginder Singh- The Economics of Development and Planning, Kalyani publishers
6. Kuznets,S (1995)- Economic Growth & Economic Inequality, AmericanReview, vol. 45
7. Arthik Samvridhi evam Vikas, Sahitya Bhawan Publications

SEMESTER-V

ECN-H-C-512-T	PLANNING, DEVELOPMENT AND PROBLEMS OF INDIAN ECONOMY	(06 Credits, 60 Lectures)
---------------	--	---------------------------

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

UNIT 1: Economic Development

- 1.1 India as a developing economy: Trends and Growth Pattern of Indian Economy
- 1.2 Population Explosion, Population Policy
- 1.3 Human Resource Development Policy and Human Development Index (HDI)- Calculation of HDI

UNIT 2: Planning and Development

- 2.1 Economic Planning: Planning Commission vs NITI Aayog
- 2.2 Five Year Plans in India:Strategy, Objectives, Achievements and Problems
- 2.3 Financing of Plans in India
- 2.4 Economic Reforms in India since 1991- An Appraisal of Economic Reforms
- 2.5 10th, 11th, 12th and 13th Five Year Plans

UNIT 3: Employment and Problems of Unemployment in India

- 3.1 3:1: Employment Trends and Structure of Employment in India
- 3.2 Nature and Concepts of Unemployment
- 3.3 Estimates of Unemployment and NSSO
- 3.4 Government's Policy for Removing Unemployment: Major Employment Programs- Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), National Policy for Skill Development and Entrepreneurship, Pradhan Mantri Kaushal VikasYojana (PNKVY), Self- Employment Programme for The Urban Poor.

UNIT 4: Poverty and Inequality in India

- 4.1 Concept and Definition of Poverty in India- Poverty Line; Estimates of Poverty

in India

- 4.2 Poverty Indexes ; HPI and MPI
- 4.3 Poverty Alleviation Programmes: National Rural Livelihood Mission (NRLM); National Urban Livelihood Mission(NULM); Pradhan Mantri Kaushal Vikash Yojna; Pradhan Mantri Jan Dhan Yojana
- 4.4 Inequalities of Income Distribution in India- Lorenz Curve; Ginni Coefficient

UNIT 5: Price Rise and Inflation in India

- 5.1 Factors Responsible for Rising Prices; Effects of Price rise
- 5.2 Measurement of Inflation: Wholesale Price Index (WPI) and Consumer Price Index (CPI)
- 5.3 Inflationary Experience in India: Inflation in Post Reform Period
- 5.4 Government Measures to Contain Inflation: Fiscal and Administrative Measures, Budgetary and Other Measures, Monetary Measures

Suggested Readings-

- 1. Bhagwati, J. (2012): Reforms and Economic Transformation in India.
- 2. Kapila, Uma (2008): Indian Economy since Independence (Latest Edition)
- 3. Puri, V.K. and Mishra, S.K. (2018): Indian Economy, Himalaya Publishing House. (Hindi/English)
- 4. Dutt, R. and Mahajan, B.D. (2018): Indian Economy, S. Chand Publications, New Delhi. (Hindi/English)
- 5. Economic Surveys , Govt. of India (Hindi/English)
- 6. RBI Bulletins
- 7. Human Development Reports (HDR) of UNDP

SEMESTER-V

ECN-H-DSE-501A-T/ ECN-H-DSE-501B-T/ ECN-H-DSE-501C-T	MATRIX AND OPERATIONS RESEARCH IN ECONOMICS / PRINCIPLES OF AGRICULTURAL ECONOMICS / MONEY AND FINANCIAL MARKETS	(06 Credits, 60 Lectures)
--	---	------------------------------

ECN-H-DSE-501A-T

MATRIX AND OPERATIONS RESEARCH IN ECONOMICS

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Introduction

- 1.1 Origin and Development of Operational Research
- 1.2 Definition and Meaning of Operational Research
- 1.3 Different Phases of an Operational Research Study
- 1.4 Scope and Limitations of Operational Research

Unit 2: Basic Matrix Algebra

- 2.1: Types of Matrices – Row and Column Vector; Identity; Singular; Diagonal; Symmetric and Skewsymmetric
- 2.2: Addition, Subtraction and Multiplication of Matrices
- 2.3: Order of Matrices; Transpose of a Matrix; Minor; Cofactors and Inverse of a Matrix
- 2.4: Properties of Determinant
- 2.5: Rank of a Matrix
- 2.6: Solutions of Equations by Matrix Inversion

Unit 3: Game Theory

- 3.1: Game Theory: Introduction and Concepts.
- 3.2: Pure Strategy: Saddle Point and its Existence
- 3.3: Mixed Strategy: Solution by using Dominance Rule and Graphical Method

3.4: Minimax Theorem.

Unit 4: Linear Programming

4.1: Linear Programming: Introduction and Concepts

4.2: Formulation of LPP

4.3: Graphical Solution of Linear Programming.

4.4: Special Cases in LPP

4.5: Duality: Definition of the Dual Problem, Primal –Dual Relationships, Economic Interpretation of Duality

Unit 5: Input-Output Analysis

5.1: Input-Output Analysis, Concept; Static Closed and Open Model; Concept and Measurement.

5.2: Simon – Hawkins condition.

5.3: Determination of Equilibrium Output and Value added

Suggested Readings :

- 1) Introduction to Operations Research – Concepts and Cases , F.S. Hillier and G.J. Lieberman, Tata McGraw Hill
 - 2) An Introduction to Game Theory, Martin Osborne, Oxford University Press
 - 3) Operations Research – An Introduction , Hamdy A. Taha , Prentice Hall
 - 4) Mathematics for Economists , B.C. Mehta & G.M.K. Madhani , Sultan Chand & Sons , New Delhi
 - 5) Mathematics for Economics and Business , R S Bhardwaj , Excel Books , New Delhi
-

ECN-H-DSE-501B-T

PRINCIPLES OF AGRICULTURAL ECONOMICS

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

UNIT 1: OVERVIEW OF AGRICULTURAL ECONOMICS

- 1.1: Nature and scope of agriculture: Traditional agriculture and its modernization;
- 1.2: Role of Agriculture in economic development; Interdependence of Agriculture and Industry
- 1.3: Mellor's approach and Lewis Model; Linkages between agriculture and industry; Sustainable agricultural development.

UNIT 2: PRINCIPLES OF AGRICULTURAL ECONOMICS

- 2.1: Farm Management; Features and Kinds of farm ownership
- 2.2: Farm size and productivity
- 2.3: Intensive and extensive cultivation
- 2.4: Classification of agricultural products (cash and food crops, cereal and non-cereal crops)
- 2.5: Agricultural finance
- 2.6: Agriculture marketing

UNIT 3: PRINCIPLES OF AGRICULTURAL PRODUCTION

- 3.1: Production and Production Functions
- 3.2: Factors-Product Relationship
- 3.3: Factor-Factor Relationship
- 3.4: Laws of Returns
- 3.5: Product-Product Relations

UNIT 4: PRINCIPLES OF AGRICULTURAL COST AND PRICING

- 4.1: Cost relationships and Profit maximization
- 4.2: Agricultural Price Determination

4.3: Supply behavior in Agriculture

4.4: Risk and uncertainty in Farming

Suggested Readings-

1. Andrew Barkley, Principles of Agricultural Economics , Routledge Taylor and Francies, London and New York.
 2. Sadhu, A.N. and Singh Amarjeet : Fundamental of Agricultural Economics, Himalaya Publishing House, New delhi.
 3. Lekhi, R.K. & Singh, Joginder: Agricultural Economics-An Indian Perspective, Kalyani Publishers, New Delhi.
 4. Raju V.T, & Vishnu Shankar Rao: Economics of Farm Production and Management; Oxford & IBH Publishing Co. Pvt.Ltd.
 5. Bilgramy, S.R.: An Introduction to Agricultural Economics
 6. Sony, R.N.: Leading Issues in Agricultural Economics
 7. Agrawal, N.L.: Hkkjrh; d`f`k dk vFkZra=] jktLFkku fganh xzaFk vdkneh] t;iqj
 8. Gupta, P.K.: Agricultural Economics, Vrinda Publicashans Pvt. Ltd.
 9. Tyagi, B.P. & Singh, H.P : New Agricultural Economics & Rural Development
-

ECN-H-DSE-501C-T
MONEY AND FINANCIAL MARKETS

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Money

1.1: Concept, Functions, Measurement;

1.2: Theories of money supply determination

Unit 2: Financial Institutions

2.1: Role of Financial Markets and Institutions

2.2: Financial Instruments : Cash and Derivative Instruments; Debt and Equity Instruments.

Unit 3: Money Market and Capital Market

3.1: Money Markets: Organisation, Structure; Instruments; Functions and Limitations ; Reforms in India

3.2: Money Market: Organised and Unorganised sector, Characteristics of a developed money market

3.3: Capital Market: Primary and Secondary

3.4: Role of Financial Derivatives and other innovations; Futures and Options; Call and Put options.

3.5: Types of Market: Stock Market, Bond Market , Commodity Market , Derivatives Market

Unit 4: Interest Rates

4.1 : Determination; Sources of interest rate differentials

4.2: Theories of term structure of interest rates

4.3: Interest rates in India

Unit 5: Foreign Exchange Market

5.1: Foreign Exchange; foreign exchange rate; foreign exchange market

5.2: Concept of spot exchange rates and forward exchange rates

5.3: Determination of exchange rates under Fixed and Flexible exchange rate regimes

Suggested Readings-

1. Richard T. Froyen , Macroeconomics, Pearson Education Asia.
2. F S Mishkin and S. G. Eakins, Financial Markets and Institutions, Pearson Education
3. F.J. Fabozzi, F. Modigliani, F. J . Jones, M. G. Ferris, Foundations of Financial Markets and Institutions, Pearson Education
4. L.M. Bhole and J Mahukud, Financial Institutions and Markets, Tata McGraw Hill
5. Edward Shapiro, Macroeconomic Analysis, Galgotia Publications, New Delhi
6. Suraj B. Gupta, Monetary Economics- Institutions, Theory and Practices, S. Chand & Company, New Delhi.

SEMESTER-V

ECN-H-DSE-502A-T/ ECN-H-DSE-502B-T/ ECN-H-DSE-502C-T	ADVANCED STATISTICS FOR ECONOMICS / INDUSTRIAL & LABOUR ECONOMICS / ECONOMICS OF SOCIAL SECTOR	(06 Credits, 60 Lectures)
--	---	------------------------------

ECN-H-DSE-502A -T

Advanced Statistics for Economics

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit -1: Introduction

- 1.1: Definition and Types of Descriptive Statistics; Applications of Tools of Descriptive Statistics
- 1.2: Data Type – Quantitative and Qualitative, Cross- Sectional and Time Series, Panel Data; Dummy Variable Data
- 1.3: Scales of Measurement – Nominal, Ordinal, Interval and Ratio Scale
- 1.4: Graphical Representation of Data

Unit -2: Definitions and Theorems of Probability, Probability Distribution and Mathematical Expectation

- 2.1: Definitions of Probability – Classical, Statistical and Axiomatic
- 2.2: Theorems of Probability – Addition, Multiplication ; Baye's Theorem and their Applications
- 2.3: Probability Distribution – Binomial and Normal Distributions; Their Properties and Applications
- 2.4: Mathematical Expectation – Meaning and Properties

Unit – 3: Sampling Distribution and Estimation

- 3.1: Sampling Distribution – Distribution of Sample Mean and Variance
- 3.2: Sampling Distribution and Standard Error; Difference between Large & Small Samples
- 3.4: Estimation – Point and Interval Estimation; Properties of a Good Estimator

Unit -4: Statistical Hypothesis Testing and Tests based on Large Sample, Small Sample & Chi –Square

- 4.1: Definition of Hypothesis; Statistical Testing ; Hypothesis Formulation Principle
- 4.2: Testing Errors – Type I & Type II Errors
- 4.3: Two tailed and One tailed Tests of Hypothesis
- 4.4: Z Test – One tailed Test for Difference between Sample Mean and Population Mean; Two tailed test for Difference between the Means of Two Samples
- 4.5: t Test – One tailed Test for Difference between Sample Mean and Population Mean; Two tailed test for Difference between the Means of Two Independent Samples; Two tailed test for Difference between the Means of Two Dependent Samples
- 4.6: Chi-Square (χ^2) test – Introduction and Application

Suggested Readings-

- 1) S. P. Gupta, Statistical Methods , Sultan Chand & Sons
 - 2) Daryab Singh , Principles of Statistics , Atlantic
 - 3) Dr. S. M. Shukla, Dr. Shiv PujanSahai , Advanced Statistical Analysis (Hindi Edition) , SahityaBhawan Publication
 - 4) Dr. B. N. Gupta , Sankhiki , SBPD Publication
 - 5) Murray R. Spiegel, John J. Schiller, R.Alu Srinivasan, Schamum's Outlines of Probability and Statistics , Tata Mc. Graw Hill Edition
 - 6) S.C. Gupta and V.K. Kapoor Fundamentals of Mathematical Statistics , Sultan Chand & Sons
 - 7) E.L. Lehmann, Joseph P. Romano , Springer Testing Statistical Hypothesis ,
 - 8) J. Crawshaw and J. Chamber, Advanced Level Statistics , Oxford
-

ECN-H-DSE-502B -T

INDUSTRIAL AND LABOUR ECONOMICS

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Industrial Economics: An Introductory Framework

- 1.1 Meaning and Definition of Industrial Economics
- 1.2 Subject Matter and Nature of Industrial Economics
- 1.3 Characteristics, Importance of the study of Industrial Economics
- 1.4 Organisation, Ownership and objectives of the Firm.

Unit 2: Industrial Productivity and Finance

- 2.1 Meaning of Industrial Productivity
- 2.2 Meaning of productivity ; Factors affecting Industrial Productivity, Importance of Productivity
- 2.3 Components of Industrial funds; Sources of Industrial finance; Major funding agencies - IDBI, IFCI, SFCs, SIDBI and Indian Commercial Banks.

Unit 3: Industrial Growth Pattern

- 3.1 New Industrial Policy in India
- 3.2 Role of Public and Private Sector; Performance of Private and Public Sector
- 3.3 Problems of Small and Cottage Industries in Economics Development of India.
- 3.4 Medium Small and Micro Enterprises (MSME)

Unit 4: Labour Economics and Labour market

- 4.1 Meaning and Definition of Labour Economics; Scope and Importance of Labour Economics
- 4.2 Nature of Labour Problems
- 4.3 Concept of Labour Market; Analysis of Demand and Supply of labour; Factors affecting Demand and Supply of labour
- 4.4 Characteristics of labours Market in India.

Unit 5: Wage

- 5.1 Wage determination, Classical Neo-Classical and Bargaining Theory of wage determination
- 5.2 Types of wages in India; National wage Policy; State Regulation of Wage; Wage Board in India.

Unit 6: Labour in India and Social Security Measures

- 6.1 Meaning of Industrial Disputes; Causes and effects of Industrial Disputes ; Machinery of setting the Industrial Disputes in India
- 6.2 Concepts of Social Security and labour welfare in India; Social Security Legislations in India; Second National Commission on labour (1999); Arjun sengupta Committee Report

Basic Readings-

- 1. George, J. Borgai; Labour Economics.
- 2. Hay, D. and D.J. Morris (1979) Industrial Economics: Theory and Evidences, Oxford University Press, New Delhi.
- 3. R.R. Burthwal (1985), Industrial economics, Wiley Eastern Ltd., New Delhi.
- 4. Singh, A. and Sadhu , A.N. (1988), Industrial Economics, Himalaya Publishing House.
- 5. Dr. B.P. Tyagi (2009), Economics and social welfare- Revised Edition, Sage Publication, New Delhi.
- 6. Dr. Kulshrestha, S.R., Audyogik Arthshastra, Sahitya Bhawan Publications
- 7. Sr. Sinha Pushpa and Dr. Sinha C.B., Shram Arthshatra, S. Publications, D.P.B.

ECN-H-DSE-502C –T

ECONOMICS OF SOCIAL SECTOR

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16)

Module I: Education and Development

- 1.1 Education as public goods; Education as an instrument of economic growth
- 1.2 Women's Education; Recent trends in Women Education in India
- 1.3 National Committees and Commissions on Education
- 1.4 Adult Literacy and Non-Formal Education for economic development.

Module II: Economics of Education

- 2.1 Human Capital Vs Physical Capital
- 2.2 Demand for Education – Private Demand and Social Demand; Determinants of demand for education
- 2.3 Costs of education- Private costs and Social costs; Wastage and Stagnation in education
- 2.4 Benefits of education - Private and Social benefits; Cost benefit analysis of education.

Module III: Health-Importance and Economics

- 3.1 Importance of Health in Economic Development
- 3.2 Meaning of Health; Determinants of health; Various Measurements of Health; Mortality and morbidity factors influencing health
- 3.3 Poverty, malnutrition and environmental issues affecting health
- 3.4 Economic dimensions of health care – Demand and supply of health care; Financing of health care and resource constraints in health care and its delivery
- 3.5 Inequalities in health- class and gender perspectives; Public expenditure on health in India

Module IV Resource Mobilisation in Education and Health

- 4.1 Pricing problem in education; Role of grants and subsidies in Education
- 4.2 Public expenditure on education in India; Educational planning in developing countries with special emphasis in India.
- 4.3 Financing of Health; Private and Public Health Service
- 4.4 Public Health delivery mechanism; Public Expenditure on Health

Module V: Gender Development Issues in India

- 5.1 Difference between Sex and Gender; Gender Mainstreaming for development
- 5.2 Gender Budgeting- Meaning; Gender-Blind, Gender-Neutral and Gender-Redistributive Policies
- 5.3 Women's education –Importance of Women's Education; Status of Women's education in India; Gender bias in Enrollment and in Drop-outs
- 5.4 Health status of women in India – Mortality and morbidity factors influencing health and nutrition of Women; Globalization and Women in India.

Suggested Readings-

- 1 Arya P.P. and B.B. Tandon (Ed) 2004 : Human Resource Development, Deep & Deep Pub. New Delhi.
- 2 Goel, S.L. and P.N. Gautam (2005) : Human Resource Development in the 21st century, Concept and case studies, Deep & Deep Pub. New Delhi.
- 3 Meier, Gerald M. and James' E. Rauch (2010) : Leading issues in economic development, Oxford Univ. Press, New York.
- 4 Todaro, Michael P and Stephen C. Smith (2003) : Economic Development, Pearson Education Ltd. World Development Report (World Bank)
- 5 Human Development Report (UNDP)
- 6 Dominic J Brewer and Patrik J McEvan, Economics of Education, Academic Press
- 7 Siuli Sarkar, Gender Disparity in India: Unheard Whimpers, PHI Learning
- 8 Himanshu Shekhar Rout, Prashant Kumar Panda, Gender and Development in India: Dimensions and Strategies, New Century Publications

SEMESTER-VI

ECN-H-C-613-T	PUBLIC FINANCE	(06 Credits, 60 Lectures)
---------------	----------------	---------------------------

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Nature and Scope of Public Finance

- 1.1: Meaning and Scope of Public Finance.
- 1.2: Distinction between Private and Public Finance; Public goods and Private goods; Merit goods.
- 1.3: Principle of Maximum Social Advantage.
- 1.4: Market Failure; Role of the government.

Unit 2: Public Expenditure

- 2.1: Meaning, Classification and Principle of Public Expenditure.
- 2.2: Cannons of Public Expenditure; Effects of Public Expenditure.
- 2.3: Causes of Growth of Public Expenditure; Trends in Public Expenditure in India.

Unit 3: Taxation

- 3.1: Sources of Public Revenue.
- 3.2: Taxation: Meaning, Cannons of Taxation; Classification of Taxes.
- 3.3: Division of tax burden—The Benefit Approach; Ability-to-Pay Approach.
- 3.4: Impact and Incidence of Taxes.
- 3.5: Taxable Capacity.
- 3.6: Effects of Taxation on production and distribution.
- 3.7: Characteristics of a good Tax System.
- 3.8: Major trends in tax revenue of the Central and State Governments in India.
- 3.9: Tax reforms; GST and VAT

Unit 4: Public Debt and Financial Administration

- 4.1: Public Debt: Meaning, Types, Sources and Need.
- 4.2: Effects of Public Debt; Burden of Public Debt.

4.3: Methods of Debt Redemption.

4.4: The Public Budget—Kinds of budget; Economic and Functional Classification of Budget.

Unit 5: Financial decentralization in India

5.1: Centre-State Financial Relationship.

5.2: Role of Finance commission.

5.3: Features of current Finance Commission.

Suggested Readings-

1. S.K. Singh- Lok Vitt(Hindi), S Chand
2. S.K.Singh- Public Finance in Theory & Practice, S Chand
3. Musgrave R.A. & Musgrave P.B.- Public Finance in theory and Practice Mc Graw Hill
4. H L Bhatia Public Finance, Vikas Publishing House
5. H L Bhatia Lok Vitt, Vikas Publishing House
- 6 . K P M Sundharam & K K Andley- Public Finance, S Chand
7. Dr B P Tyagi- Public Finance- Jai Prakash Nath & Co.

SEMESTER-VI

ECN-H-C-614-T	HUMAN DEVELOPMENT DIMENSIONS & INDIA	(06 Credits, 60 Lectures)
---------------	---	------------------------------

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1 Introduction

- 1.1 Meaning and Importance of Human Development ; Indicators of Human Development
- 1.2 Human Development and Economic Development- two way linkage
- 1.3 Human Development - Components; Human Development Indices- HDI, PQLI,MPI

Unit II Health and Development

- 2.1 Health: Meaning; Determinants of health; Measures of health; Importance of Health in Economic Development
- 2.2 Nutrition: Meaning; Components; Relationship between Nutrition and health
Malnutrition [OBJ]; Life expectancy
- 2.3 Inequalities in Health in India with special reference to Sex, Residential Status(Urban/Rural)

Unit III Education and Development

- 3.1 Education: Meaning ,Importance of Education in Economic Development
- 3.2 Measures of Education : Enrolment Ratio- Gross and Net ; Meaning and importance of Literacy ; Meaning and concepts of Literacy Rates- Literacy rate, Adult Literacy rate, Youth literacy rate, Female literacy rate
- 3.3 New Education Policy 2020

Unit IV Gender Dimensions in Human Development

- 4.1 Importance of women in economic development; Meaning of women empowerment; Importance of women empowerment
- 4.2 Health of Women: Importance; India's Gender bias in health, nutrition, Sex ratio
- 4.3 Education of women: Importance; Gender differences in literacy rates, enrolment , dropouts in India
- 4.4 Social and Economic causes of poor health and education of women in India
- 4.5 Income of women- Extent of inequality in India and causes.

4.6 Measures of Gender inequality : Gender-related Development Index(GDI), Gender Inequality index (GII)

Unit V Human Development in India

5.1 India Human Development Report; Trend of Human Development Index in India; Reasons for recent improvement in India's HDI

5.2 India's HDI rank and reasons for low ranking; Poverty in India- India's Human Poverty Index (HPI) and Multidimensional Poverty Index (MPI) ; Ginni coefficient of income Inequality in India; Gender inequality index(GII) in India

5.3 India's initiatives for human development- Sarv-Siksha Abhiyan; Aayushmaan Bharat; National Food Security Mission; Pradhan Mantri Jan Dhan Yojna; Kaushal Vikas Yojna

Suggested Readings

- 1.Human Development Reports (UNDP)
- 2.Arya P P and B B Tandon(Eds) Human Resource Development; Deep and Deep; New Delhi
3. Himanshu Shekhar Rout and S B Murthy; Human Development in India: Challenges and Policies; New Century Publications
- 4.Goel S L and P N Gautam; Human Resource Development in the 21st Century- Concept and Case Studies; Deep and Deep Pub; New Delhi
- 5.Himanshu S Rout and Padmaja Mishra; Social Sector in India- Issues and Challenges;
- 6.Dr Jeyasingh , Dr Solomon Raj and Dr D J Josephine; Health Economics; Creative Crows Publisher LLP
- 7.Abhijit Banerjee and Esther Duflo; Poor Economics; Public Affairs Publication

SEMESTER-VI

ECN-H-DSE-603A-T/ ECN-H-DSE-603B-T/ ECN-H-DSE-603C-T	ADVANCED MATHEMATICAL ECONOMICS / LEADING ISSUES IN INDIAN AGRICULTURE / INDIAN BANKING & FINANCIAL SYSTEM	(06 Credits, 60 Lectures)
--	--	------------------------------

Semester VI

ECN-H-DSE-603A-T

ADVANCED MATHEMATICAL ECONOMICS

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

UNIT 1: Elementary Concepts

- 1.1: Role of Mathematics in Economics
- 1.2: Set Theory: Use of Venn Diagrams and Cartesian Products

UNIT 2: Differentiation and its Application

- 2.1: Differentiation: Rules and Higher Order Derivatives
- 2.2: Elasticity of a function: Price Elasticity of Demand and Supply; Relationship between Elasticity of Demand, Average Revenue & Marginal Revenue
- 2.3: Equilibrium: Concept of Equilibrium of the Firm under Monopoly and Duopoly Market, Effects of Taxation and Subsidy on Monopoly

UNIT 3: Partial and Total Derivatives

- 3.1: Partial Differentiation: Techniques of Partial Differentiation; Second Order Partial Derivatives and Young's Theorem
- 3.2: Economic Applications of Partial Derivatives – Partial Elasticity of Demand , Marginal Utility, Short Run and Long Run Production Functions Homogeneous Functions, Euler's Theorem and Properties of Cobb-Douglas Production Function
- 3.3: Total Differential: Techniques of Total Differential, Maxima – Minima of Functions Involving two or more variables through Hessian Determinant Approach

- 3.4: Economic Application of Total Differentiation – Constrained Equilibrium of Consumer through MU and Indifference Curve Approach and Equilibrium of Producer through Output Maximization and Cost Minimization Approach by using Lagrange Method

UNIT 4: Integration and its Application

- 4.1: Integration: Definite And Indefinite Integrals
- 4.2: Economic Applications of Indefinite Integration: Marginal propensity to save, Marginal propensity to consume, Capital Formation
- 4.3: Economic Application of Definite Integration: Consumer's surplus; Producer's Surplus

Unit 5: Differential Equation and Difference Equation

- 5.1: Differential Equation: Concept and Solution of First Order Differential Equation- General and Particular
- 5.2: Economic Application of Differential Equation: Capital Accumulation, Market Equilibrium through simple Demand & Supply Model
- 5.3: Difference Equation: Concept & Solution of First Order Difference Equation
- 5.4: Economic Application of Difference Equation: Simple Cobweb Model

Suggested Readings:

- 1) Sydsaeter K. and Hammond P., Mathematics for Economic Analysis, Pearson Educational Asia : Delhi
- 2) Chiang A.C. and Kevin Wainright , Fundamental Methods of Mathematical Economics , McGraw Hill
- 3) Allen. R.G.D., Mathematical Analysis for Economics, All India Publishers and Distributors
- 4) Edward T. Dowling Introduction to Mathematical Economics, McGraw Hill
- 5) Mehta B.C. & Madnani G.M.K., Mathematics for Economists, Sultan Chand & Sons ,New Delhi
- 6) Bhardwaj R S, Mathematics for Economics and Business , Excel Books , New Delhi

Semester VI

ECN-H-DSE-603B-T

LEADING ISSUES IN INDIAN AGRICULTURE

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

UNIT 1: RURAL ECONOMY OF INDIA

- 1.1: Structure of Indian economy; place of agriculture in rural economy; composition of the Indian rural economy;
- 1.2: Farm sector and non-farm sector;
- 1.3: Diversification of Agriculture; Agriculture and Allied Activities (Fisheries, Horticulture, Floriculture); In India its Growth, Problems and State Policies, Cattle Wealth of India and Dairying.
- 1.4: Rural Industrialization: Food Processing and Agro Based Industries; Development of Rural Infrastructure.

UNIT 2: DEVELOPMENT OF AGRICULTURE

- 2.1: Agricultural Resources in India: Land Utilization, Cropping Pattern
- 2.2: Irrigation in India, Command Area Development And Flood Control
- 2.3: Trends in Agriculture Growth and Agriculture Productivity; Pattern of Agricultural Development: Regional Variation Agrarian Relations
- 2.4: Land reforms and Agricultural Labor in India Agrarian relations, Historical Evolution. Land Reforms Program during Post Independence in India;
- 2.5: Agricultural labor, characteristics and problems.

UNIT 3: TECHNOLOGICAL CHANGES IN AGRICULTURE

- 3.1: Technological Advancement in agriculture; traditional techniques and practices; HYV seeds – fertilizer, water technology (Green Revolution);
- 3.2: Sustainable Agriculture; Emerging Trend in Agricultural Technology;
- 3.3: Dry Land Farming; Use of Bio-Technology Techniques

UNIT 4: STATE AND AGRICULTURE

- 4.1: Agriculture Planning in India: Decentralized Planning and Indicative Planning
- 4.2: Incentives in Agriculture; Price and Non- Price Incentives; Input Subsidies; Agriculture Price Policies(APP)
- 4.3: Agricultural Marketing in India, Nature of Demand and Supply of Agricultural Products, Need for State Intervention
- 4.4: Food Security in India and Public Distribution System.

Basic Readings-

- 1. C.B. Memoria, Agricultural Problems of India, Kitab Mahal
- 2. R.K. Lekhi, Joginder, Agricultural Economics – An Indian Perspective, Kalyani Publication.
- 3. J.K. Prasad, Agriculture in India – Institutional Structure and Reforms, New Century Publication.
- 4. Sadhu & Singh, Fundamentals of Agricultural Economics, Himalyan Publication House.
- 5. Dutt and Mahajan: Indian Economy
- 6. Mishra, S.K.& V.K. Puri: Indian Economy
- 7. Govt. of India: Economic Survey
- 8. Mishra & Puri: Bhartiya Arth Vawastha

Semester VI

ECN-H-DSE-603C-T

Indian Banking and Financial System

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Banking System

- 1.1: Balance Sheet and Portfolio Management
- 1.2: Indian Banking System: Evolution, structure and changing role
- 1.3: Nationalisation of Banks; Bank Mergers
- 1.4: Public and Private Banks in India

Unit 2: Central Bank and Monetary Policy

- 2.1: Central Bank: Functions and objectives; balance sheet; goals, targets
- 2.2: Role and Functions of RBI: Development and Regulatory functions.
- 2.3: Instruments of monetary control; monetary management in an open economy
- 2.4: Monetary Policy: Objectives and Limitations; Current Monetary Policy of RBI
- 2.5: Policy Reforms in Indian Banking: Banking Sector Reforms- Narasimhan committee Report I and II
- 2.6: Classification of Assets and Provisioning, NPA – Causes and Remedial Measures

Unit 3: Introduction to Indian Financial System

- 3.1: Significance and Definition
- 3.2: Purpose and Organisation
- 3.3: Liberalisation of the financial system
- 3.4: Non-Banking Financial Institutions in India
- 3.5: Rural Banking in India
- 3.6: Financial Inclusion: Concept; Importance; Recent Government initiatives

Unit 4:Financial Institutions in India

- 4.1: Importance of Financial System in India.
- 4.2: Financial Institutions in India: Function and Growth.
- 4.3: Measures to Liberalise Financial System.
- 4.3: Banking and Financial Sector Reforms: Impact on Economic Growth in India.

Suggested Readings-

1. M.Y. Khan , Indian Financial System, Tata McGraw Hill
2. David G. Luenberger, Investment Science, Oxford University
3. Thomas E. Copeland, J. Fred Weston and Kuldeep Shastri, Financial Theory and Corporate Policy, Prentice Hall.
4. S. Natarajan & R. Parmeshwaran, Indian Banking, S. Chand, New Delhi
5. Bharti V. Pathak, Indian Financial System , Pearson.
6. Padmalatha Suresh and Justin Paul, Management of Banking and Financial Services, Pearson.
7. Banking : An Introduction, Indian Institute of Banking and Finance.
8. Various Latest Issues of RBI Bulletins, Annual Reports, Reports on Currency and Finance.

SEMESTER-VI

ECN-H-DSE-604A-T/ ECN-H-DSE-604B-T/ ECN-H-DSE-604C-T	INTRODUCTORY ECONOMETRICS / DEMOGRAPHY / JHARKHAND ECONOMY	(06 Credits, 60 Lectures)
--	--	------------------------------

Semester VI

ECN-H-DSE-604A-T

INTRODUCTORY ECONOMETRICS

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit –I: Introduction

- 1.1 Nature , Scope and Division of Econometrics
- 1.2 Methodology of Econometrics
- 1.3 Distinction between Economic Model and Econometric Model
- 1.4 Concept of Stochastic Relation , Role of Random Term in Econometric Model

Unit –II: Simple Linear Regression Model

- 2.1: Assumptions of Simple Linear Regression Model
- 2.2: Concept of Population Regression Function, Sample Regression Function and Estimation of Model by the Method of Ordinary Least Squares
- 2.3: Properties of OLS Estimators, Gauss Markov Theorem
- 2.4: Test of Significance of the Parameters
- 2.5: Coefficient of Determination

Unit –III: Multiple Linear Regression Model

- 3.1: Estimation of Parameters of Multiple Linear Regression Model
- 3.2: Statistical Properties of Parameters
- 3.3: Test of Significance of the Parameters
- 3.4: Goodness of Fit – R² and Adjusted R²
- 3.5: Analysis of Variance (ANOVA) and Regression

Unit –IV: Violation of Classical Assumptions

- 4.1: Heteroscedasticity – Causes, Consequences, Test and Remedial Measures
- 4.2: Autocorrelation - Causes, Consequences, Durbin– Watson Test, Remedial Measures, First Order Autoregressive Scheme, Mean, Variance and Co-variance of Auto correlated Us

4.3: Multicollinearity - Causes, Consequences, Test and Remedial Measures

Suggested Readings-

- 1) Johnston J., Econometrics Methods, McGraw Hill
- 2) Damodar N. Gujarati, Basic Econometrics , Tata McGraw Hill
- 3) William H. Greene , Econometric Analysis , Pearson Education
- 4) D. N. Gujarati and D.C. Porter , Essentials of Econometrics , McGraw Hill , 4th Edition, International Edition , 2009
- 5) G. S. Maddala, Introduction to Econometrics , Wiley India
- 6) A. Koutsoyiannis , Theory of Econometrics, ELBS with Macmillan

SEMESTER VI
ECN-H-DSE-604B-T
DEMOGRAPHY

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

Unit 1: Population and Development

- 1.1 Meaning and Scope of Demography.
- 1.2 Population Growth: Meaning, Component and Measurement.
- 1.3 Theories of population- Malthus theory, Optimum theory, Theory of Demographic transition.

Unit 2: Techniques of Analysis of Population Data

- 2.1. Fertility: Meaning, Importance of study of fertility, Concept of Crude Birth Rate, Total Fertility Rate, Gross Reproduction Rate and Net Reproduction Rate Factors affecting fertility rate, Trend of fertility ratio India.
- 2.2. Nuptiality- Meaning, Concept, Marital status, Trends in age at marriage in India.
- 2.3. Mortality –Meaning, Concept of Death rates, Crude and Age specific, Infant mortality rate, Maternal Mortality rate, Factors for decline in mortality in recent past.

Unit 3 Population Indices

- 3.1. Life table, Basic concept of life table, type and forms of life table, Preparation of life table.
- 3.2. Population Pyramid, Concept, Construction & its Significance,
- 3.3 Population Projection: stable and stationary population.
- 3.4: Concepts of population Cohort ; Meaning and components of Vital Statistics, 'de facto ' and 'de jure' Census of a area

Unit 4: Sources of Demographic Data in India

- 4.1: Sources of Demographic data: Census, Registration ans Sample Survey- Their relative merits and demerits

- 4.2: Population census, methodology and characteristics of census, nature of information collected in 1971, 1981, 1991, 2001 and 2011.
- 4.2: Registration method in India
- 4.3: NSSO and its Rounds, MOSPI and Demographic data

Unit 5: Population Policy in India

- 5.1. Evolution of population policy in India, The shift in policy from population control to family welfare, to women empowerment.
- 5.2. The new population policy

Suggested Readings-

- 1. J.N. Desai, M.L. Jhingan, and B.K. Bhatt (2003) Demography, Vrinda Publications.
- 2. Mishra,J.,(2016) : Demography , Sahitya Bhawan Publications.
- 3. Preston, S., Heuveline, P., and Guillot, Michel (2000): Demography Measuring and Modeling Population Processes.
- 4. Sinha,V. C. and Sinha,P., (2018) Demography, SBPD Publication.
- 5. Weinstein, Jay and Pillai, Vijayan K. (2000): Demography: The Science of Population.

SEMESTER VI

ECN-H-DSE-604C-T

JHARKHAND ECONOMY

Credits 06, Lectures 60, Tutorials 15 Marks: 20 (MSE)+ 80 (ESE) =100

Pass Marks: (MSE:08+ ESE: 32)= 40

Instruction to Question Setter for :- Mid Semester Examination (MSE):

1/2 Hrs. One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE): Full Marks 80, Time 3 Hrs.

Five Questions have to be answered out of total of nine Questions of 16 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 02 mark each. Question No.1B will comprise of 02 short answer type questions of 04 marks each (to be answered in about 100 words each). Any four questions from 2 to 9 are to be answered. Question nos. 2 to 8 shall be of descriptive type of 16 marks each. Question no 9 will be of short note type 4 questions, each carrying 8 marks in which any two should be answered (8x2=16).

UNIT 1: Jharkhand Economy and it's Growth

- 1.1 Evolution of Jharkhand economy; Structure and basic features of Jharkhand's Economy; Sectoral composition
- 1.2 Growth in SDP and per capita NSDP since 2000
- 1.3 Composition, Production and Productivity in Agriculture in Jharkhand; Agricultural Growth in Jharkhand.
- 1.4 Major Industries of Jharkhand; Industrial growth in Jharkhand ; Main problems of Industrial development in Jharkhand

UNIT 2: Demographic features of Jharkhand

- 2.1 Population growth, density, and Regional distribution
- 2.2 Literacy, Sex Ratio, Composition of work force, rural urban composition - their present status and change with Special Reference Census 2001 and 2011; Their Inter district variations
- 2.3: Tribal population in Jharkhand: main tribes; Demographic features of tribal population in the state;
- 2.4: Problems of human trafficking, Witch hunting

UNIT 3: Poverty and Unemployment in Jharkhand

- 3.1 Status of poverty in Jharkhand; Major Poverty Alleviation Programs in Jharkhand and their outcomes, MGNREGA, PMGSY, NRLM,
- 3.2 Unemployment in Jharkhand- status and trend in Rural and Urban areas
- 3.3 Status of food security in Jharkhand ; , Food security schemes ; Child and Women malnutrition in Jharkhand
- 3.4 Status of Education and Health indicators in Rural and Urban areas of Jharkhand- literacy rates, Enrollment Ratios, Mortality rates, Maternal mortality rates, Child Mortality rates in Jharkhand etc and.

UNIT 4: Land, forest and environmental issues in Jharkhand

- 4.1 Land reforms and agrarian Relations
- 4.2 Tribal and alienation,
- 4.3 Development induced displacement : impacts and Policy initiatives
- 4.4 Forest issues and implementation of FRA, 4.5 Environmental Degradation and policy in the state

UNIT 5: Migration and Urbanisation in Jharkhand

- 5.1 Rural- Urban migration and Intra state migration in Jharkhand
- 5.2 Causes of migration in Jharkhand- push and pull factors; Effect of Migration on rural sector and urban sector
- 5.3 Government Programs to prevent migration
- 5.4 Meaning of Urbanisation; Urbanisation in Jharkhand- status and trend ; causes and consequences of rising urbanisation in the state

UNIT 6: Five year plans in Jharkhand

- 6.1 Strategy and achievement in X and XI plan, TSP and SCSP
- 6.2 Public Finance trends in Jharkhand
- 6.3 Industrial policy in Jharkhand

Suggested Readings:

- 1. Jharkhand Samanya gyan ; Manish Ranjan
- 2. Micro Planning of Jharkhand; Kunal Vikram
- 3. Jharkhand -Land and People, Raj Kumar and S Ram, Arjun publication
- 4. Jharkhand- A State Study Guide, Neeraj Kumar Jha, Jeevonsons Publications District Gazetteer of Jharkhand , S C Bhat, Gyan Publishing House
- 6. Development of Bihar and Jharkhand, Sharat Kumar, Pravin Kumar Jha, Shipra Publications



Binod Bihari Mahto Koyalanchal University, Dhanbad

End-Semester Examination xxxx (Session: xxxx-xx)

Subject/Code:

Full Marks: 80

Pass Marks: 32

Time: 3Hours

General Instructions:

Candidates are required to give their answers in their own words as far as practicable.

The Questions are of equal value (16 Marks)

Answer any five out of 9 questions of the following in which Q.1 is compulsory. Questions 2 to 8 are long answer type questions of 16 marks each and Question 9 is short notes(8x2=16)

1. (A) Multiple Choice Question

(1x8=08)

- (i)
- (ii)
- (iii)
- (iv)
- (v)
- (vi)
- (vii)
- (viii)

(B) Short answer type questions

(4x2=08)

- (a)
- (b)

(Long answer type questions)

Answer any four of the following.

(16 Marks each)

- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

9. Short notes type questions

Answer any two of the followings

(8x2=16)

- (a)
- (b)
- (c)
- (d)

.....X.....



Binod Bihari Mahto Koyalanchal University, Dhanbad
End-Semester Examination xxxx (Session: xxxx-xx)

Subject/Code:

Full Marks: 40

Pass Marks: 16

Time: 2Hours

General Instructions:

Candidates are required to give their answers in their own words as far as practicable.

The Questions are of equal value (16 Marks)

Answer any five out of 9 questions of the following in which Q.1 is compulsory. Questions 2 to 8 are long answer type questions of 8 marks each and Question 9 is short notes(04x2=08)

1(A) Multiple Choice Question

(1x4=04)

- i.
- ii.
- iii.
- iv.

(B) Short answer type questions

(2x2=04)

- (a)
- (b)

(Long answer type questions)

Answer any four of the following.

(08 Marks each)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

9. Short notes type questions

Answer any two of the followings

(4x2=08)

- (a)
- (b)
- (c)
- (d)

Annexure 1

Binod Bihari Mahto Koyalanchal University, Dhanbad
Ability Enhancement Compulsory Course (AECC)

Syllabus for Bachelor of Arts (ECONOMICS) in Ability Enhancement
Compulsory Course (AECC) (Honours/Gen/Pass) Under Choice Based Credit
System

Academic Session: w.e.f. 2020-2023
for All Constituent/Affiliated Colleges Under

There shall be one AECC course in semester I and one in Semester II
For AECC -1 of Semester I- Students have to take one language course of fifty
marks from the 3 options given below:-

- 1) MIL ENGLISH (50 marks) OR
 - 2) MIL HINDI (50 marks) OR
 - 3) HINDI (25 marks) + ALTERNATIVE ENGLISH (25 marks)
- BANGLA (25 marks)
- SANSKRIT (25 marks)
- URDU (25 marks)

MIL ENGLISH (50 marks)
(Credit Theory 02), Theory-30 Lectures

Marks:10(MSE) +40 (ESE) =50. Pass Marks: (MSE:04 + ESE: 16) =20

Instruction to Question Setter for: Mid Semester Examination (MSE): 1/2 Hrs

One semester internal Assessment (SIA) of 10 marks

End Semester Examination(ESE) : 2 Hrs

There will be two groups of questions. Five questions to be answered out of Nine Questions. Question No.1(A) will be MCQ of 1 mark each (four questions).Question No.1 (B) will be short answer type to be answered in about fifty words of 2 marks (2 Questions).

Group B will contain descriptive type of eight questions of eight marks each, out of which any four are to answer. Each question carry 08

marks. The question no. 9 will be of short notes type, each carrying four marks (4x2=8) in which only two should be answered out of four options.

OBJECTIVE: *To equip students effectively to acquire skills in reading, writing, comprehension and communication, as also to use electronic media for English Communication.*

Unit I:

Communication – Definition, stages, barriers, types: verbal and non-verbal, Listening- Meaning, Nature and importance, Principles of Good Listening.

Unit II:

Class-presentation (Oral for five minutes) on any of the above- mentioned topics: Descriptive writing, expansion of an idea.

Unit III:

Writing skills –, notice writing, advertisement writing, précis writing, essay writing, letter writing (applications), Business letterformats (letters of enquiry, replies and complaints), resume writing, covering letter

Unit IV: Vocabulary building: One word substitution, synonyms and antonyms, idioms and phrases

Suggested Reading:

Technical Communication, M.H. Rizvi, Tata McGrawhill Effective Business Communication, Asha Kaul Developing Communication Skills, Krishna Moha

MIL HINDI (50 marks)
Credit Theory(02), Theory-30 Lectures

Marks:10(MSE) +40 (ESE) =50. Pass Marks: (MSE:04 + ESE: 16) =20

Instruction to Question Setter for: Mid Semester Examination (MSE): 1/2 Hrs

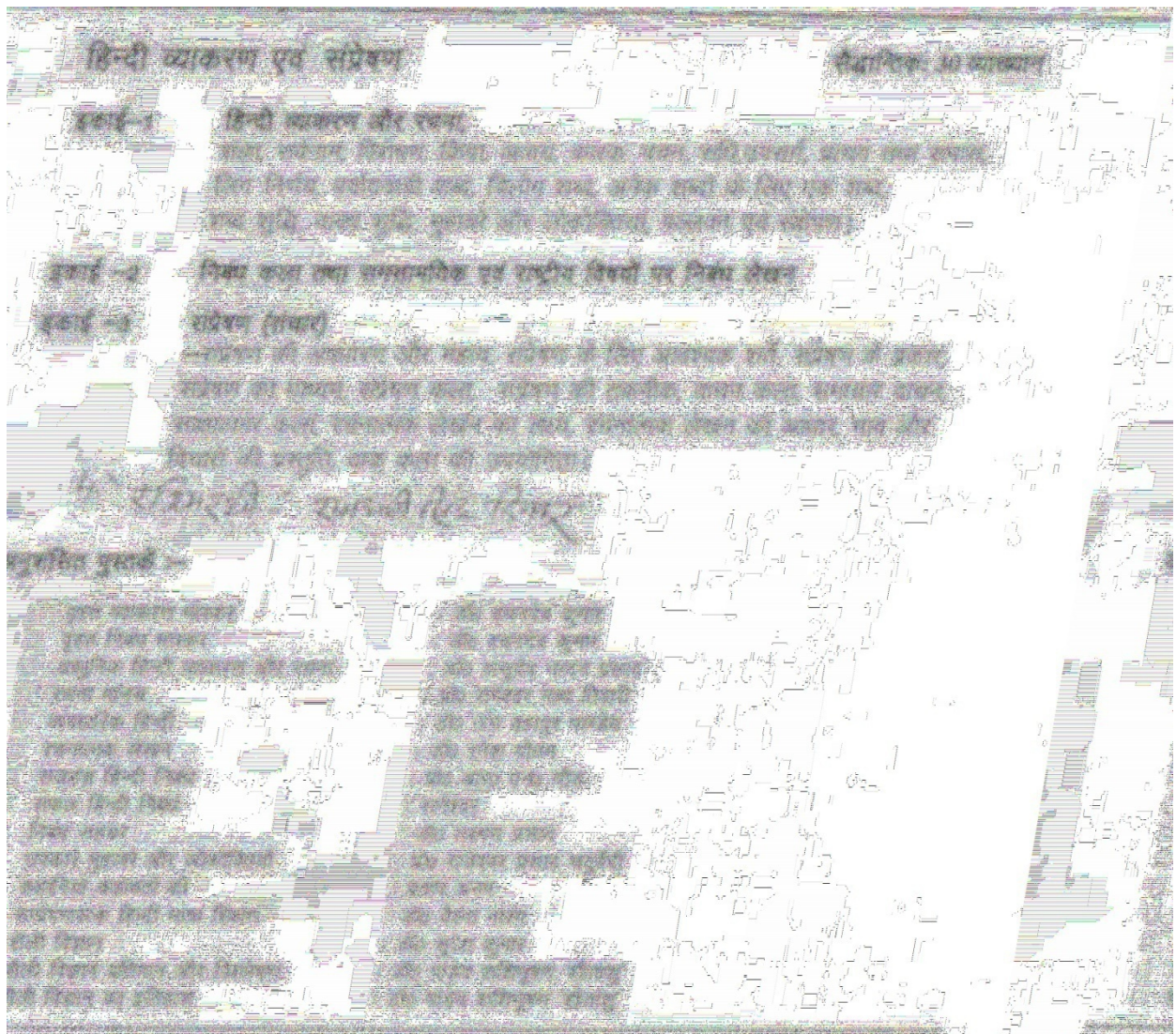
One semester internal Assessment (SIA) of 10 marks

End Semester Examination(ESE) : 2 Hrs

There will be two groups of questions. Five questions to be answered out of Nine Questions. Question No.1(A) will be MCQ of 1 mark each (four questions).Question No.1 (B) will be short answer type to be answered in about fifty words of 2 marks (2 Questions).

Group B will contain descriptive type of eight questions of eight marks each, out of which any four are to answer. Each question carry 08

marks. The question no. 9 will be of short notes type, each carrying four marks (4x2=8) in which only two should be answered out of four options.



HINDI (25 marks)

Credit Theory (01), Theory-15 Lectures

Marks:05(MSE) +20 (ESE) =25 Pass Marks: (MSE:02 + ESE: 08) =10

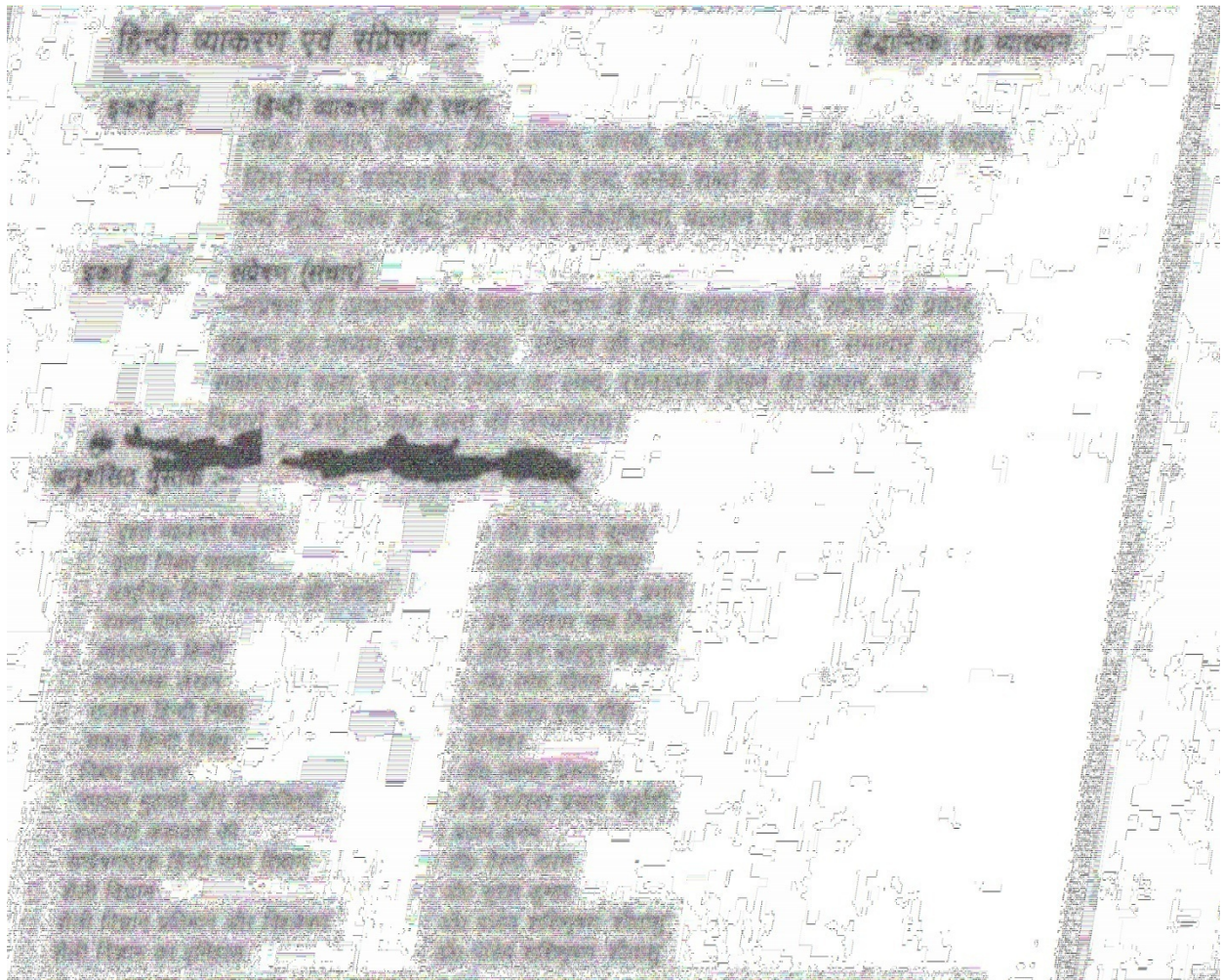
Instruction to Question Setter for: Mid Semester Examination (MSE): 1/4 Hrs

One semester internal Assessment (SIA) of 05 marks

End Semester Examination(ESE) : 1 Hrs

There will be two groups of questions. Five questions to be answered out of Nine Questions. Question No.1(A) will be MCQ of 1/2 mark each (four questions).Question No.1 (B) will be short answer type to be answered in about twenty five words of 1 marks (2 Questions).

Group B will contain descriptive type of eight questions of four marks each, out of which any four are to answer. Each question carry 04 marks. The question no. 9 will be of short no type, each carrying two marks (2x2=4) in which only two should be answered out of four option



ALTERNATIVE ENGLISH(MB) (25 marks)

Credit Theory (01), Theory-15 Lectures

Marks:05(MSE) +20 (ESE) =25 Pass Marks: (MSE:02 + ESE: 08) =10

Instruction to Question Setter for: Mid Semester Examination (MSE): 1/4 Hrs

One semester internal Assessment (SIA) of 05 marks

End Semester Examination(ESE) : 1 Hrs

There will be two groups of questions. Five questions to be answered out of Nine Questions. Question No.1(A) will be MCQ of 1/2 mark each (four questions).Question No.1 (B) will be short answer type to be answered in about twenty five words of 1 marks (2 Questions).

Group B will contain descriptive type of eight questions of four marks each, out of which any four are to answer. Each question carry 04 marks. The question no. 9 will be of short notype, each carrying two marks (2x2=4) in which only two should be answered out of four option.

Unit I: Novel

1.1 The English Teacher (R.K. Narayan) Unit II: Poetry

1. Stopping by words on a Snowy Evening (Robert Frost)
2. A slumber did My Sprit Seal (William Woodworth)
3. My Native Land (H.L.V. Derozio)
4. The Night of Scorpion (Nissim Ezekiel)
5. Break, Break, Break (A.L. Tennyson)
6. Starlit Night (G.M. Hopkins) Unit III: Grammer

1.2 Common Errors

1.3 Fill up the blanks with prepositions.

1.4 One word substitution. Suggested Reading:

A String of Poems (Edited by: S.M.P.N. Singh Sashi and A.B.Sharan) The Winged Word (Edited by: David Green)

BANGLA (25 marks)

Credit Theory 01), Theory-15 Lectures

Marks:05(MSE: 1/4 Hrs) +20 (ESE : 1 Hrs) =25 Pass Marks: (MSE:02 + ESE: 08) =10

Instruction to Question Setter for Mid Semester Examination (MSE): 1/4 Hrs

One semester internal Assessment (SIA) of 05 marks

End Semester Examination(ESE) : 1 Hrs

There will be two groups of questions. Five questions to be answered out of Nine Questions. Question No.1(A) will be MCQ of 1/2 mark each (four questions).Question No.1 (B) will be short answer type to be answered in about twenty five words of 1 marks (2 Questions).

Group B will contain descriptive type of eight questions of four marks each, out of which any four are to answer. Each question carry 04 marks. The question no. 9 will be of short notype, each carrying two marks (2x2=4) in which only two should be answered out of four option.



SANSKRIT (25 marks)

Credit Theory (01), Theory-15 Lectures

Marks:05(MSE) +20 (ESE) =25 Pass Marks: (MSE:02 + ESE: 08) =10

Instruction to Question Setter for:

Mid Semester Examination (MSE): 1/4 Hrs

One semester internal Assessment (SIA) of 05 marks

End Semester Examination(ESE) : 1 Hrs

There will be two groups of questions. Five questions to be answered out of Nine Questions. Question No.1(A) will be MCQ of 1/2 mark each (four questions).Question No.1 (B) will be short answer type to be answered in about twenty five words of 1 marks (2 Questions).

Group B will contain descriptive type of eight questions of four marks each, out of which any four are to answer. Each question carry 04 marks. The question no. 9 will be of short notype, each carrying two marks (2x2=4) in which only two should be answered out of four option.



URDU (25 marks)
Credit Theory 01), Theory-15 Lectures

Marks:05(MSE) +20 (ESE) =25 Pass Marks: (MSE:02 + ESE: 08) =10

Instruction to Question Setter for: Mid Semester Examination (MSE): 1¼ Hrs

One semester internal Assessment (SIA) of 05 marks

End Semester Examination(ESE) : 1 Hrs

There will be two groups of questions. Five questions to be answered out of Nine Questions. Question No.1(A) will be MCQ of 1/2 mark each (four questions).Question No.1 (B) will be short answer type to be answered in about twenty five words of 1 marks (2 Questions).

Group B will contain descriptive type of eight questions of four marks each, out of which any four are to answer. Each question carry 04 marks. The question no. 9 will be of short notype, each carrying two marks (2x2=4) in which only two should be answered out of four option.



For AECC of Semester II- All students have to compulsorily take ENVIRONMENTAL SCIENCE

ENVIRONMENTAL SCIENCE

Credit Theory 02), Theory-30 Lectures Marks:10(MSE) +40 (ESE) =50.

Pass Marks: (MSE:04 + ESE: 16) =20

Instruction to Question Setter for :-

Mid Semester Examination (MSE): 1/2 Hrs

One semester internal Assessment (SIA) of 10 marks

End Semester Examination (ESE):

Full Marks 40, Time 2 Hrs.

Five Questions have to be answered out of total of nine Questions of 08 marks each. Question no 1 is compulsory. Question No.1A will contain 04 MCQ of 01 mark each. Question No.1B will comprise of 02 short answer type questions of 02 marks each (to be answered in about 50 words each). Question nos. 2 to 8 shall be of descriptive type of 8 marks each and Question no 9 will be of short note type, each carrying four marks (4x2=8) in which only two should be answered out of four options Any four questions from 2 to 9 are to be answered.

Unit 1 : Introduction to environmental studies (2 lectures)

Multidisciplinary nature of environmental studies;

Scope and importance; Concept of sustainability and sustainable development.

Unit 2 : Ecosystems (2 lectures)

What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems :

Forest ecosystem Grassland ecosystem Desert ecosystem

Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

Unit 3 : Natural Resources : Renewable and Non-renewable Resources (5 lectures)

Land resources and land use change;

Land degradation, soil erosion and desertification.

Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.

Water : Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state).

Energy resources : Renewable and non renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

Unit 4 : Biodiversity and Conservation (5 lectures)

Levels of biological diversity : genetic, species and ecosystem diversity;
Biogeographic zones of India;
Biodiversity patterns and global biodiversity hot spots
India as a mega–biodiversity nation; Endangered and endemic species of India
Threats to biodiversity : Habitat loss, poaching of wildlife, man–wildlife conflicts, biological invasions;
Conservation of biodiversity : In–situ and Ex–situ conservation of biodiversity
Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

Unit 5 : Environmental Pollution (5 lectures)

Environmental pollution : types, causes, effects and controls; Air, water, soil and noise pollution
Nuclear hazards and human health risks
Solid waste management : Control measures of urban and industrial waste.
Pollution case studies.

Unit 6 : Environmental Policies & Practices (4 lectures)

Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture
Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).
Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

Unit 7 : Human Communities and the Environment

Human population growth: Impacts on environment, human health and welfare.
Resettlement and rehabilitation of project affected persons; case studies.
Disaster management : floods, earthquake, cyclones and landslides.
Environmental movements : Chipko, Silent valley, Bishnois of Rajasthan.
Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.
Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).

Unit 8 : Field work (3 lectures) (Equal to 4 lectures)

Visit to an area to document environmental assets: river/ forest/ flora/ fauna, etc.
Visit to a local polluted site—Urban/Rural/Industrial/ Agricultural.

Study of common plants, insects, birds and basic principles of identification. Study of simple ecosystems—pond, river, Delhi Ridge, etc.

Suggested Readings:

1. Raziuddin, M., Mishra P.K. 2014, A Handbook of Environmental Studies, Akanaksha Publications, Ranchi.
2. Mukherjee, B. 2011: Fundamentals of Environmental Biology. Silverline Publications, Allahabad.
3. Carson, R. 2002. Silent Spring. Houghton Mifflin Harcourt.
4. Gadgil, M., & Guha, R. 1993. This Fissured Land: An Ecological History of (2 Lectures) India. Univ. of California Press.
5. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge. Gleick, P. H. 1993.
6. Water in Crisis. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press.
7. Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. Principles of Conservation Biology. Sunderland: Sinauer Associates, 2006.
8. Grumbine, R. Edward, and Pandit, M.K. 2013. Threats from India's Himalaya dams. Science, 339: 36—37.
9. McCully, P. 1996. Rivers no more: the environmental effects of dams (pp. 29—64). Zed Books.
10. McNeill, John R. 2000. Something New Under the Sun: An Environmental History of the Twentieth Century.
11. Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia: Saunders.
12. Pepper, I.L., Gerba, C.P. & Brusseau, M.L. 2011. Environmental and Pollution Science. Academic Press.
13. Rao, M.N. & Datta, A.K. 1987. Waste Water Treatment. Oxford and IBH Publishing Co. Pvt. Ltd.
14. Raven, P.H., Hassenzahl, D.M. & Berg, L.R. 2012. Environment. 8th edition. John Wiley & Sons.
15. Rosencranz, A., Divan, S., & Noble, M. L. 2001. Environmental law and policy in India. Tripathi 1992.
16. Sengupta, R. 2003. Ecology and economics: An approach to sustainable development. OUP.
17. Singh, J.S., Singh, S.P. and Gupta, S.R. 2014. Ecology, Environmental Science and Conservation. S. Chand Publishing, New Delhi.
18. Sodhi, N.S., Gibson, L. & Raven, P.H. (eds). 2013. Conservation Biology: Voices from the Tropics. John Wiley & Sons.

19. Thapar, V. 1998. Land of the Tiger: A Natural History of the Indian Subcontinent.
20. Warren, C. E. 1971. Biology and Water Pollution Control. WB Saunders.
21. Wilson, E. O. 2006. The Creation: An appeal to save life on earth. New York: Norton.
22. World Commission on Environment and Development. 1987. Our Common Future. Oxford University

Annexure 2

Binod Bihari Mahto Koyalanchal University, Dhanbad

SKIL ENHANCEMENT COURSE(SEC)

For Honours Degree:

(I) Third Semester: Compulsory for All Disciplines

Any one of the following three in a particular college depending upon the facility available:

1. Constitution of India and Human Rights
2. Environment and Public Health
3. Computer Applications and Information Technology

(II) Fourth semester: One from the following may be chosen in a college and may be common for a faculty:-

1. Entrepreneurship
2. Life Skills and Personality Development
3. Human Resource Development
4. Legal Aid and Awareness
5. Indian History, Culture and Diversity
6. Science and Life
7. Banking and Finance
8. Building Mathematical Ability
9. Capital and Stock Market
10. Any other subject to be decided by the Academic Council.

COMMON FOR ALL SEC PAPERS :-

(Credit: Theory-02), Theory-30 Lectures. Marks:10(MSE) + 40 (ESE) =50.

Pass Marks: (MSE:04 + ESE: 16) =20

Instruction to Question Setter for:

Mid Semester Examination (MSE): 1/2 Hrs.

One semester internal Assessment (SIA) of 10 marks

End Semester Examination(ESE) :2 Hrs

There will be two groups of questions. Five questions to be answered out of Nine Questions. Question No.1(A) will be MCQ of 1 mark each (four questions). Question No.1 (B) will be short answer type to be answered in about fifty words of 2 marks (2 Questions).

Group B will contain descriptive type of eight questions of eight marks each, out of which any four are to answer. Each question carry 08 marks. The question no. 9 will be of short notes type, each carrying four marks (4x2=8) in which only two should be answered out of four options.

1. CONSTITUTION OF INDIA AND HUMAN RIGHTS

Unit 1: Characteristics of Indian Constitution

- i Parliamentary form of Government. ii. Federal State
- iii Rule Of Law. iv. Secular State
- v Socialistic State
- vi Republic

Unit 2-Fundamental Rights and Duties

- i. Natural Rights and Fundamental Rights.
- ii. Fundamental Rights and 42nd amendment.
- iii. Right to equality, freedom, Constitutional remedies, Freedom of Religion,
- iv. Fundamental Duties.

Unit 3: Emergency provision in Indian Constitution

- i. National Emergency. ii. President rule.
- iii. Financial Emergency.

Unit 4 : Evolution, Concept and Meaning of Human Rights

- i. Evolution of Human Rights a. Contribution of Rules.
 - a) contribution of Religious Texts and Preachers.
 - b) contribution of Thinkers.
 - c) Contributions of Constitutional Measures.
 - d) contributions of international organisations.
- ii. Contribution of International Organisations.

Unit 5 : Classification and types of Human Rights

- i. Political,Social,Economic and Cultural Rights
- ii. 1st Generation,2nd Generation, 3rd Generation of Human Rights.
- iii. Positive and Negative Human Rights.
- iv. Individual Human rights and Collective Human Rights. v. Types

Unit 6: Universal Declaration of Human Rights 1948

- i. Importance ii. Preamble
- ii. Article 1-30

Essential Reading :

1. Bakshi,P.M.(2012)The constitution of India, New Delhi : Universal Law
2. Fadia B. L.(2013).Indian Government and Politics. Agra: Sahitya Bhawan 3.Ghai, K.K. (2012) Indian Government and Politics, New Delhi: PHI Learning.

2. ENVIRONMENT AND PUBLIC HEALTH

Unit I - Linkages between Environment and Health 06-classes

Understanding linkages between Environment and Public Health: Effect of quality of air, water and soil on health.

Perspective on Individual health: Nutritional, socio-cultural and developmental aspects, Dietary diversity for good health; Human developmental indices for public health.

Unit II- Climate change and implications on public health 08 -classes

Global warming - Agricultural practices (chemical agriculture) and Industrial technologies (use of non-biodegradable materials like plastics, aerosols, refrigerants, pesticides); Manifestations of Climate change on Public Health Burning of Fossil fuels , automobile emissions and Acid rain.

Unit III - Perspectives and Interventions in Public Health 08 -classes

Epidemiological perspectives

Disease burden and surveillance;

Alternative systems of medicine - Ayurveda, Yoga, Unani, Siddha and Homeopathy (AYUSH);

Universal Immunization Programme (UIP); Reproductive health-Youth Unite for Victory on AIDS (YUVA) programme of Government of India. Occupational health hazards-physical-chemical and biological. Occupational diseases- prevention and control.

Unit IV - Environmental Management Policies and Practices Municipal 08 classes

Solid waste management: Definition, sources, characterization collection and transportation and disposal methods. Solid waste management system in urban and rural areas.

Municipal Solid waste rules.

Policies and practices with respect to Environmental Protection Act, Forest Conservation Act, Wild life protection Act, Water and Air Act, Industrial, Biomedical and E waste disposal rules.

3. COMPUTER APPLICATIONS AND INFORMATION TECHNOLOGY

Unit-01 (9L)

Fundamentals of computer (with Computer architecture); Multimedia: Introduction, Definitions, Where use Multimedia-Multimedia in Business, School, Home, Public Places, Virtual; Delivering Multimedia. Text: Meaning, Fonts and Faces, Using Text in Multimedia, Computer, and Text, Font Editing, and Design Tools, Hypermedia and Hypertext; Sound: The power of Sound, Digital Audio, MIDI Audio, MIDI vs Digital Audio, Multimedia System Sounds, Audio File Formats.

Unit-02 (5L)

Cloud computing The Internet and Multimedia: Internet History, Internetworking, Multimedia on the Web.

Computer Network: Components of the Network, Communication medium, LAN, WAN, HTTP protocol, Server, Client

Unit-03 (9L)

Introduction to Information Security: Introduction, History of Information security, what is security, Critical characteristics of information, components of information system, approaches to information security implementation; Cloud computing, Artificial Intelligence

Unit-04 (7L)

Security for Business, threats, attacks, secure software;

Hacking: Introduction, Legal, Ethical and Professional Hacking, International Laws and Legal bodies

Reference Books –

1. Nishit Mathur, Fundamentals of Computer , Aph publishing corporation(2010)
2. Misty E. Vermaat, Microsoft word 2013 1st Edition (2013).
3. Satish Jain, M.Geeta, MS- Office 2010 Training Guide, BPB publication (2010)
4. Joan Preppernau, Microsoft PowerPoint 2016 step by step, Microsoft press(2015) Douglas E Corner,
5. The Internet Book 4th Edition, prentice –Hall(2009)
6. Faithe wempen, word 2016 in depth 1st edition, que publishing(2015)
7. Steven welkler, Office 2016 for beginners, Create Space Independent

4.CAPITAL AND STOCK MARKET

Unit-I

Introduction of capital market, difference between capital and stock market. SEBI guideline for capital and stock market. 10 classes

Unit-II

Calculation of Net Present Value (NPV) for single payment, calculation of NPV for PVIFA, FV and Future Value Interest Factor Annuity (Mathematical Calculations).10- classes

Unit-III 10-classes

Valuation of Equity by Balance Sheet, Dividend Discount Model (DDM), Price Equity Method (PEM), Capital Asset Pricing Method (CAPM), Valuation of Preference Share and Bond.

References:

1. Financial Management, I.M. Pandey, Vikash Publication.
2. Financial Management, Prasanna Chandra, Tata Mc Graw hill.

5. BANKING AND FINANCE

Unit. I

Banking and financial institutions in India: Commercial banks, Co- operative Banks, Regional Rural banks, Agriculture and Rural Development Banks (SLDBs), Development Banks and NBFCs; their constitution, Functions, working and evolution.10-classes

Unit.II

Financial markets: Structure, institution and operating mechanism and its role in Economic Development. Developed and Underdeveloped Markets, Money Market in India: Importance, features instruments.10- classes

Unit.III

Capital Markets in India: New issue market and stock exchange, importance of stock exchanges: National stock exchange, methods of floating new issues, types of shares and debentures, The securities and Exchange Board of India (SEBI), need for establishment of SEBI. Objectives and role of SEBI.10-classes

References:

1. Practice of Law of bank in gbyH.RSoneji
2. Banking Law and Practice by P.N. Varshney.
3. Practice of banking Advances by Bediand Hardikar.
4. Lawand Practice of Banking by P.N. Varshneyand Gopal Swaroop.
5. BankingTheory, Lawand Practice by Gordon & Natarajan.

6.ENTREPRENEURSHIP

Unit-I

Meaning, concept, characteristics and types of entrepreneurs. Development of entrepreneurship, Culture, Stages in Entrepreneurship processes. 06 - classes.

Unit-II 08-classes

Micro, small and medium Enterprise Industries in India.

Unit-III 08-classes

Public and private system of stimulation, support and sustainability of Entrepreneurship, Requirement, Availability and access to Finance, Marketing Assistance, Technology and Industrial Accommodation.

Unit-IV

Identification of Business idea, project formulation and Business plan, Project report, Appraisal. 08-classes

Book Recommended:

1. . Desai. V. Dynamic of Entrepreneurial Development and Management.
2. Batra Dangwal, Entrepreneurship and scale Industries.
3. Malhotra I. S and Gupta S.L. Management of small-scale Industries. New Delhi, Galgotia
4. Drucker, Peter Innovation and Entrepreneurship. East West Press (P) Ltd., 1992.
5. Gupta, C.B and Srinivasan, Entrepreneurial Development in India

7. HUMAN RESOURCE DEVELOPMENT

Objective: This is a follow up course of Personnel Management into a broader area and perspective. The purpose of this course is to provide an in-depth knowledge of the concepts, principles, methods of HRM.

Unit II (10 classes)

Definition of HRD, Nature and scope of HRD, HRM and HRD - Comparison and contrast; Concepts, objectives, processes, issues and emerging trends.

Unit II (10 classes)

Career Planning and Development: Introduction, Meaning and objectives, Individual Career Planning, Career Management Meaning and Element, Benefits of career Planning and Development, Limitations and Steps in Effective Career Planning and Development.

Unit III (10 classes)

Learning Processes, principles, Management development methods and Benefits of Management developments Programs; HRD experiences at Indian Corporate Level.

References:

1. Srivastava, M.P Human Resource Planning (1997). Inst. Of Applied Manpower Research, New Delhi.
2. Maheshwari, B.L.& Sinha, D.P. Management of Change through HRD (1991). Tata McGraw Hill, New Delhi
3. Pareek, Udai and Nair, M.R. Managing Transitions; The HRD Response (1992) Tata McGraw Hill, New Delhi.
4. Silvere, D.N. HRD; The Indian Experience, (1991), New Delhi.
5. Brinkerhoff, Robert O. Achieving Results from Training; How to evaluate HRD to strengthen Programmers and Increase Impact (1987), Jossey Bas, San Francisco.

8.BUILDING MATHEMATICAL ABILITY

Unit-I

Introduction to Natural numbers, integers, rational, real, Complex and prime numbers. There sums and products. Euclid division algorithm. Encryption and prime numbers. (08-classes)

UNIT – II

Linear equations

Linear equations and in equations in two variables x and y .

Introduction to matrices. Solution of simultaneous linear equations by matrix.

Linear equations represented by straight lines. Finding region bounded by a set of linear in equations. (08 classes)

UNIT – III

Statistics

Data and its collection in Statistics. Tally sign and frequency table. Presentation of data by charts and curves – dot plots, bar graphs, line graphs, frequency curves.

Mean, median, mode of a data. Population and sample. (07 classes)

UNIT – IV

Probability

Experiment, outcomes, events, types of events, sample space. Probability of occurrence of an event.

Addition and multiplication formulae.

Simple problems on probability. (07- classes)

Reading List

1. Building Mathematical Ability By S.Chand-S.Chand Publishing.
2. Parks,H.M.(2007)A Mathematical View of our world (1 ed.). Thomsons Brooks Cole.

9.LIFE SKILL AND PERSONALITY DEVELOPMENT

Objective: -The objective of this paper is to acquaint the students with life skill and Personality Development. This paper act as a guideline for the students who are ready to plunge into highly competitive world.

Unit I Self-awareness and creating self-image: -

Concept of Life Skill, SWOT analysis, intrapersonal Emotional quotient, Self-confidence, Self-esteem, Self –development, Self-respect, Personal hygiene, grooming and dress code.

Unit II

Effective communication Skill: - Concept of communication, nature of communication, importance of communication, process of communication, building rapport, how to ask questions intelligently, facing the interview, how to write impressive resume, etiquette and manners

Unit III

Know Your Personality: - Concept of Personality Development, Stages of Personality Development, Determinants of Personality developments, Ethics and Values, attitudes and behavior, Perceptions, Self-motivation, Legacy, Interpersonal relationship.

References: -

1. Bhatia, R.C, Personality Development, one books Pvt. Ltd., New Delhi.
2. Madhukar. R. K, Business Communication, Vikash Publication House, Pvt.Ltd, New Delhi.
3. Bruckmaan. G.C& Hartley Peter, Business Communication, Ane Books Pvt.Ltd, New Delhi

10. SCIENCE AND LIFE

Unit-I

Basic components of science and its brief idea.

- I Life science:-cell and its structure. Brief idea of respiration, digestion and growth.
- II Chemical science: Organic and inorganic molecules. Macro and micronutrients with special reference to carbohydrate, fat and protein.
- iii. Physical science: basic idea of diffusion, osmosis and turgor pressures. Light as source of energy, Gravitation and gravitational forces.

Unit-2

Science and Human Health.

- I. Different type of vitamins, their sources and diseases caused by their deficiency
- II. Diseases caused by microbes. Their preservation.
- III. Common medicinal plants-crops, vegetables, fruits, spices.

Unit-III

Science and Food security.

- I. Green revolution and second green revolution. ii. Common food plants-crops, vegetables, fruits spices. iii. Agricultural sciences of Jharkhand.

Unit-IV

Science Environment and Man.

- i. Basic idea of climate changes and its impact.
- ii. Environmental problem, its impact and management. iii. Environmental awareness.

11.INDIAN HISTORY,CULTURE and DIVERSITY

Unit-I

History and Culture through the Ages:

- i. Ancient India.
- ii. Medieval India. iii. Modern India.
- iii. Indian languages and literature.

Unit- II

Religion and Philosophy

- i. Religion and Philosophy in Ancient India
- ii. Religion and Philosophy in medieval India
- iii. Religion and social reform movement in modern India. iv. Folklore and oral traditions.

Unit-III

Painting, performing Arts and Architecture:

- i. Indian painting
- ii. Indian music, dance and drama
- iii. Indian architecture and Sculpture
- iv. Tribal arts and crafts in Jharkhand in Jharkhand

Unit-IV

Ethnic and cultural Diversity:

- i. Tribal movements in Jharkhand and their leaders.
- ii. Fairs, festivals and socio-cultural traditions with special reference to Jharkhand.
- iii. Indian sports and games.
- iii. Socio-cultural issues in contemporary India.

Suggested readings:-

1. Basham,A.L., The wonder that was India,Picador,pan macmillan,London,2004
2. Bose,N.K., Culture and Society in India, Asia Publishing House,1967.
3. Chandra, satish, Medieval India, Vol, I and II, Har-Anand, New Delhi,2015.
4. Chandra,Bipan,History of Modern India, orient Blackswan,New Delhi,2016
5. Dube,S.C., Tribal heritage of india,Vikas,New Delhi,2007.

12.SOFT SKILLS

Course Description

The course intends to transfer soft skills and numeric ability skills to the students which will help them in accessing job opportunities particularly in the banking sector

Unit 1. Resume writing and Interview skills

Resume Writing: What is Resume? Types of Resume? Chronological, Functional and Mixed Resume, Steps in preparation of Resume. Interview Skills: Common interview Questions, Attitude, Body Language, The mock interviews, Phone interviews, Behavioral Interviews. 10 classes

Unit 2. Group discussion (GD) and team building

Group Discussion: Group Discussion Basics, GD Topics for Practice, Points for GD Topics, Case- Based and Article based Group Discussions, Points for Case Studies, and Notes on Current Issues for GD. 10 classes

Unit 3. Numerical Ability

Average, Percentage, Profit and Loss, Simple Interest, Compound Interest, Time and Work, Pipes and Cisterns, -Time and Distance, Problems on Trains, Boats and Streams Calendar, Ratios and Proportions.

Basis Readings:

1. Agarwal.R. S (2010) Quantitative Aptitude, S. Chand and Sons
2. Prasad. L.M (2000) Organizational Behavior S. Chand
3. Khera. Shiv. You Can Win MC Millan Books, Revised Edition