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.Eugine, Environmental Economics,Vrinda 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

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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.

ENVIORMENTAL 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).