Module-1 : Basic Structure of the Indian Economy

Basic features of the Indian Economy-Natural and Human Resources – Social and Physical Infrastructure – Need for Structural Change – Growth and Structural Changes in Indian Economy.

Module-2 : The Agricultural Sector:

Institutional Structure – Land Reforms in India : Technological Change in Agriculture-Pricing of Agricultural Inputs and Output; Terms of Trade between Agriculture and Industry; Agricultural Finance Policy; Agriculture Marketing and Warehousing; Issues in Food Security-Policies for sustainable agriculture;

Module-3 : The Industrial Sector:

Industrial Policy; Public Sector Enterprises and their Performance; Problems of Sick Units in India; Privatization and Disinvestment Debate; Growth and Pattern of Industrialization; Small-Scale sector; Productivity in Industrial Sector; Exit Policy-Issues in Labour Market Reforms; Approaches for Employment Generation.

Module-4 : Poverty and Five Year Plans in India :


Module-5 : Economic Reforms in India

Rationale of Internal and External Reforms; Globalization of Indian Economy; W.T.O. and its Impact on Different Sectors of the Economy; Need for and Issues in Good Governance; Issues in Competition and Safety nets in Indian Economy.
References:
7. Eashwar C. Dhingra _ “Indian Economy”.
M.S. Economics (IX Semester)
PAPER-II : Emerging Issues in Global Economy


References:

and sons, 2000.

M.S. ECONOMICS
IX SEMESTER

Paper-III : ECONOMIC FORECASTING


Module 5: Forecasting by Exponential Smooting: Single and Double Exponential Smoothing – Host Winters Model – Box-Jen Kins Model.

Text Books:

4. Francis Diabold: Elements of Forecasting, South Western College Publishing.
8. William H. Gree: Econometric Analysis, Pearson’s Education.

M.S. Economics (IX Semester)

PAPER-IV: Techniques of Demographic Analysis

Module 1: Nature and Scope of Demography: Coverage, Content and Errors in Demographic Data; Population Composition; Dependency
Ratio; Adjustment of Age data – Use of Whipple, Myer and UN Indices; Chandrasekhar – Deming Formula to Check completeness of Registration data – India population census; Demographic Surveys in India (NFHS).

**Module 2:** Measures of Fertility; Stochastic model of reproduction (Dandekar’s Modified Binomial and Poission Distribution, William Brass Model), Distribution of time to first birth, Inter-life birth intervals and number of births; Social and Economic Theories of Fertility

**Module 3:** Measures of Mortality : Construction of Abridged Life Tables, Relation between Functions of Life Tables; Distribution of Life Table Function; Uses of Life Tables, Factors Affecting Mortality; Methods of Population Projections.

**Module 4:** Stable and Quasi – Stable Populations; Intrinsic Growth rate; Models for population growth and their fitting to population data; Linear, Exponential, Logarithmic, Modified logarithmic, Gompertz and Logistic curves.

**Module 5:** Population Theories (Malthus, Optimum, Demographic Transition) Migration and Urbanisation; India’s Population Trends and Policy; Demographic dividend in India.

**References:**

10. Ramakumar, P (1986); Technical Demography, Wiley Eastern Ltd.
12. Spiegelman, M (1969); Introduction to Demographic Analysis, Harvard University Press.

**M.S. Economics (IX Semester)**

**PAPER–V: Statistical Package for Social Sciences (SPSS)**

Unit-I:
Introduction to SPSS
Preparation of Data Files - Types of Data, Merging of files - Measurement of Attributes - Classification and Tabulation - One, two and three way tables, Frequency Distribution - Discrete, Grouped, Continuous and Bivariate Frequency Distribution - Graphical and Diagrammatic Representation of Data - Various Bar Charts and Pie-Chart – Frequency Curve – Ogive – Box Plot – Histogram - Descriptive Statistics – Measures of Central Tendency, Measures of Dispersion, Skewness, Kurtosis, Percentiles, Co-efficient of Variation, Distributions – Binomial, Poisson, Negative Binomial, Normal, Exponential, Uniform.

Unit-II:
**Statistical Inference**
Point estimation- sampling distribution, Confidence intervals, Testing of Hypothesis – Z-test, t-test, F-test, X²-test – Non-parametric tests.

Unit-III:
**Design of Experiments**
ANOVA – One way analysis, two way analysis, CRD, RBD, LSD, Multiple comparison- Fractional Factorial designs, Response surface Methodology.

Unit-IV:
**Multivariate Analysis**
Correlation Analysis, Regression Analysis, Linear Models, Log Linear Models, Non-Linear Models, Generalized Linear Models, Logistic Regression, Clustering and Classification, Principle Component Analysis, Factor Analysis, Canonical Correlation

Unit-V:
**Simulation**

Reference :
SPSS Instruction manual version-16.0

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**M.S. Economics (IX Semester)**
**PAPER-V: Statistical Analysis System (SAS)**

Unit-I
Introduction to SAS:
Data Management Facility, Structure of SAS program, Data Analysis and reporting utilities.
Creating permanent libraries, using temporary and permanent data set within the libraries, Methods of importing data into SAS and saving datasets in SAS libraries.

**Data Manipulation / Transformation:**
Creating new variables, operating logical expressions, recoding, variable and value labeling, sorting. (Procedures statement like Print, etc)

**Advanced Data manipulation techniques:**
Renaming and retaining variables, Do Blocks & Do Loops, sub-setting datasets (select), working with arrays, generating multiple datasets, merging files, reshaping dataset.

Unit-II

**Descriptive Statistics:**
Measures of Central Tendency, Measures of Dispersion, Skewness, Kurtosis, Percentiles, Co-efficient of Variation- fitting of Distribution

Unit-III

**Testing Hypothesis:**
Parametric tests: – Z-test, t-test, F-test, X²-test
Non – parametric tests: - Mann Whitney U test (independent observations), Wilicoxon signed rank test (paired observations) and calculating the correlation coefficient.

Unit-IV

**Advanced statistical techniques**
Regression Analysis, Linear Models, Log Linear Models, Non-Linear Models, Logistic Regression, Clustering and Classification, Principle Component Analysis, Factor Analysis, Canonical Correlation

Unit-V

**Simulation and report generation**

**References:**
1. The Little sas book a primer third edition