### Syllabus for Entrance Examination to M. Phil / Ph.D. in Economics

### **Department of Economics University of Gour Banga**

### Part-I

### **Research Methodology (50 Marks)**

#### Module-1:

Meaning of Research, Objectives of research, motivation in research, types of research, research approaches, significance of research, research methods versus methodology, research and scientific method, importance of knowing how research is done, research process, criteria of good research,

### Module-2:

Research problem, identifying the research problem, formulation of research problem, selecting the problem, necessity of defining the problem, and scientific methods of research.

#### Module-2:

Logic and scientific method, deductive and inductive methods, the case study method, merits and demerits of case study methods, merits and demerits of survey methods, types of survey, different types of sample survey.

#### Module-3:

Census and Sample Survey, Implications of a Sample Design, Steps in Sampling Design, Criteria of Selecting a Sampling Procedure, Characteristics of a Good Sample Design, Different Types of Sample Designs

### Module-4:

Hypothesis, Basic Concepts Concerning Testing of Hypotheses, Procedure for Hypothesis Testing, Tests of Hypotheses, Important Parametric Tests, Hypothesis Testing of Means, Hypothesis Testing for Differences between Means.

### Module-5:

Schedule and questionnaire, principle underlying the construction of questionnaire, measurement and scaling techniques, processing and analysis of data.

### Module-6:

Interpretation and report writing steps, bibliography, and quality of good research report.

## Part-II

## **Core Subject- Economics (50 Marks)**

### **Unit-I: Microeconomics**

Theory of Consumer Behaviour, Theory of the Firm, Partial Equilibrium in a Competitive Market, General Equilibrium and Welfare Economics, Theories of Uncertainty, Monopoly and Monopolistic Competition, Oligopoly, Economics of Information.

## **Unit-II: Macroeconomics**

<u>Complete Keynesian Model:</u> Aggregate demand and supply version of the Keynesian model, definition of involuntary unemployment, unemployment equilibrium, and differences of Keynes with the classical ideas, Theory of Real Business Cycles

<u>New Keynesian Macroeconomics</u>: Price setting under monopolistic competition, Menu cost-Time- dependent rules, staggering and the effects of money- State dependent rules and the effects of money- Labour market: efficiency wages financial markets and credit rationing.

<u>Rational Expectations</u>: Rational expectations equilibrium approach: imperfect information, nominal money and output. Output, Inflation and Unemployment: Monetarist vs. Keynesian views, Friedman's restatement of the Quantity Theory of Money, Short-run and long-run Philips curve, Theories of Stagflation.

<u>Basic Infinite Horizon Models Ramsey Problem:</u> Command Economy, decentralized economy, dynamic efficiency- Government in the decentralized economy.

Overlapping Generations Model OLG with production: two period lives, dynamic inefficiency and altruism. Social Security models under OLG.

<u>Dis-equilibrium Macro Analysis:</u> Equilibrium and Disequilibrium Models of Patinkin, Clower, Barro-Grossman, Disequilibrium models of Clower, Barro-Grossman, Malinvaud and Benassy.

## **Unit-III: Development Economics**

Different Approaches to Development, Strategies of Development, Dual economics structure, open and disguised unemployment and migration, Poverty and Inequality, Trade and Development, Globalization and Development.

## **Unit-IV: Growth Economics**

Neo-classical growth models, Technical progress; Emergence of new growth theories,

### **Unit-V: Indian Economic Issues**

Economic reforms & Performance of Indian economy-Global economic crisis and Indian economy, Trends and Patterns of Employment in India, Trends and Patterns of poverty in

India, Agricultural Growth and Performance, Industrial Sector in India and Economic Liberalization, Food Security in India.

# **Unit-VI: Statistics**

Measures of dispersion, Correlation and regression analysis, sampling theory, Theory of probability and theoretical distribution; Estimation and hypothesis testing.

# **Unit-VII: Environment and Resource Economics**

Environment-Economy Relationship, Sustainable Development and Common Property Resources, Environmental Pollution and Control Measures.

# **Unit-VIII: Public Economics**

Theory of Government Intervention, Externality and Public Choice, Taxation and Public Expenditure, Fiscal Federalism, Mechanics of Budget, Fiscal Policy and Debt Management.

# **Unit-IX: Basic Econometrics**

The Scope and Methodology of Econometrics, The Simple Linear Regression Model (SLRM), The Multiple Linear Regression Model, Dummy Variables, Heteroscedasticity, Multicollinearity, Autocorrelation, General Linear Regression Model, Qualitative Dependent Variable Models-Logit Model and Probit Model, Time Series Econometrics, Panel Data Regression Model. Simultaneous Equation system.