M.Sc. Ag. Economics First Year

Paper I-Micro Economics

- 1- Difinations, Scope and subject matter of economics. Micro and Macro economics, Techniques of economics analysis. Limitation of economics
- 2- Theory of Demand_Demand functions, Elesticity of Demand, Shifts in Demand, Utility analysis of demand, Indifference curve and consumer equilibrium, Slutsky theorem, Elementary revealed preference theory, Nature and properties of demand functions fo agricultural commodities.
- 3- Theory of Firm: Optimising Behaviour-Profit and sales maximization, F-P, F-F and F-P relationships, Production functions, Demand for factors of production, Derivation of supply function, Nature of supply function for agricultural commodities.
- 4- Theory of Cost-Nature of cost, Classification of cost, short run and long run costs, Margnal and average cost schedule, Cost functions.
- 5- Market structure, Pricing and Out-classification of markets, competitive firm and industry, Pure Monopoly, Monopolistic competition Duopoly and Oligopolistic interdependence and Kined Demand curve, Effect of Taxation, Prices and Outpur,
- 6- Theory of Distribution-Marginal productivity theory of distribution in perfectly competitive markets-factor proce determination, theory of rent, theory of wages, Interest and profit,
- 7- International Trade: Theory of International trade, International trade and thory of comparative advantages, Machanisms of adjustment, exchange rate variation, tarriffa and quotas, balance of payment, Inter-ragional trade agreements. International Trade of Agricultural Commodities.

Paper –II Economic Stucture of Indian Agriculture

- 1. Place of agriculture in India's Economy: Characteristics of Indian Aagriculture, Structure of Indian Agriculture, Productivity of crop enterprise in India vis a vis other countries; Causes of low productivity; Agriculture production variability and their causes.
- 2. Land: Economics concept of land, supply and demand of land, land-mum ratio, pattern of land use, structure of land holdings in India, Land tenures and land reforms. Irrigation facilities and land use, development prospects of irrication facilities in India.
- 3. Labour: Composition of labour force in India, Measurement of unemployment and underemployment in Indian agriculture; wage levels and wage differentions in agriculture, man-power planning and agriculute, doctorine of new mariginal productivity of labour and possibilities of labour transfer from agriculture to nonagriculture sector.
- 4. Capital: Role of capital in agricultural production, Nature and extent of Credit needs of the farmers, Debt burden of the formers, agriculture credit Agencies and their officicacies. Taqavi Loans, cooperative credit. Commercial Bank credit.
- 5. Organisation: Efficiency of agriculture under various systems and types of farming. Impact of new agricultural technology on the structure and functional efficiency of farm, especially in respect of (i) irrigation, (ii) seeds and (iii) fertilizers.
- 6. Agricultural Taxation: Principles and Policy of Agricultural Taxation in India. Tax burden on agriculture, Possibilities and consequences of agricultural income tax.

Paper –III Agricultural Marketing

- 1. Consepts of markets and marketing, Scope and magnitude of agricultural marking.
- 2. Demand for farm preducts, quantitative estimation of demand relationships, demand projections and derived demand.
- 3. Supply of farm procucts, factors influencing supply, supply projections and marketable surplus.
- 4. Agriculutral produc prices and their determination; price stabilization, price discrimination.
- 5. Marketing Channels, agencies and functions; Marketing margins and costs, Marketing efficiency.
- 6. Forwarded trading and speculation, Future markets and price stability.
- 7. System of marketing of farm production in India. Problem and prospects of improvement, Marketing legislations in India: Study of regulated markets.
- 8. Temoral Market price relationships: time and storage cost, intertemporal proce and eqilibrrium models; Temporal price levels, Price changes overtime; Interntemporal and special price equilibrium models for single and multiple products.
- 9. Agricultural Price Policy; Its role and function, Basic concepts in agricultural price policy, Agricultural Price equilibrium models for single and multiple producst.

Paper -IV Agricultural Statistics

- 1. Concept of variables; Equations and solving of simultaneous equations; Factoristion, Indices.
- 2. Differentiation: Some sommon laws of fifferentiation, Differentiation of power an exponential functions.
- 3. Matrix algebra and determinant: concept of vectors, matrix additions, substraction, multiplication and Inversion.
- 4. Theory of Sampling: Purposive and Random. Multistage Samling, Stratipled Sampling, Probabilistic sampling.
- 5. *Characteristics of normal blinominal and poisons distribution.
- 6. Concept of standard deviation, Standard, Error and Variance.
- 7. Tests of significance- T, Z, G and X tests.
- 8. Correlation and Regression Least Squares- Methods, Specification of the variables and specification errors.
- 9. Time Series Data: Problems of antercorrelations and multicollinearlity.
- 10. Analysis of Business time series.
- 11. Construction and use of Index number.
- 12. Interpolation & Extapolation.

Practical

- 1- Estimation of demand for agricultural commodities.
- 2- Study of frading and refraction.
- 3- Case study of marketing of major agricultural commodity to find the following:
 - a. Extent of Marketable surplus
 - b. Its price spread.
 - c. Cost of marketing and marketing margins.
 - d. Cost of sorage.

M.Sc. Ag. Economics Final Year

Paper I-Macro Economics and Economic growth.

- 1. Deffinition of Macro Economics: Macro Economic variables. Functional relationships and parmeters, Economic Models Static and Dynamic Equilibrium.
- 2. The National Income Accounts: Gross and net National product, Nation Income, disposable income and per capita income, Conceptual problems in estimation of National Income.
- 3. The Keynesion and Post-Keynesion Macro Economics: Calssical full employment model and obstacles to full employment; consumption function and factors determining it: Simple theory of income determination; Fiscal Policy aned income determination; Level of investment and Facotors affecting investment; General Equilibrium of product and money markets; the demand for money and stabilization policy; Levels of employment, full employment; Price level and theory of interest rate.
- 4. Indiation; Causes and consequence; excess demand inflation and monetary sector; gap anlysis; cost push inflation, stabilization policies.
- 5. Concept of economic development and economic growth: Measurement of economic growth. Theories of growth; Classical, non-classical and modern growth models and there applicability to developing contries, Meaning of underdevelopment; characteristic of developing national economics.
- 6. Development Strategy: Institutional approaches, non-economics factors in economic development, dualism in development, balanced and unbalanced growth, Investment policies and criteria for developing contries.

Paper II-Farm Management and Production Economics

- 1. Concept and definitions of Farm Mangement: Scope of farm Management; Role of Farm Management in Indian Agriculture; Nature and charcheristics of farming in India.
- 2. *Principles of Farm Management: The principle of comparative advantages Law of diminishing returnes; The principle of enterprise-combination, Cost principles; Time element in management decisions, decision criteria; Compounding and discounting.
- 3. The Production Relationship: FP: Relationship between resource and products; Three stages of production, TP, MP, AP and their relationships; Elasticity of Productions; concept of rationality and irrationality; Necessary and sufficient conditions.

F.F: Resource substitution and least cost combination; isoquanto, Ridge, Line Scale, Expansion path. Elasticity of Factor substitution, Horizental and vertical combination of products, Different types of relationships in products Joint, competitive, complimentary, Supplementary, Product substitution and optimum combination of enterprises, transformation curve, Rational and irrational Zones, Elasticity of product substitution.

- 4. Decision making in Agriculture: Frame work of decision making, Typical farm management decisions; process of decision making, Decision making under risk and uncertainty, Decision theory and Came theory and their application.
- 5. Farm Planning: Farm planning its importance and methods, Farm planning in Indina. Complete and partial budgeting, Steps in making a farm budget.
- 6. Linear Programming: Assumption of a linear programming model, Essential of linear programming; formation of a maximization and minimization problem; Concept of basis Graphic and Simplex selution of linear programming; Formulation of a dual. Application of linear programming to farm decision making.
- 7. Production Functions: Types and forms of production functions. Characteristics and interpretation of different production functions.
- 8. Farm size and Returns to Scales, Mesures of farm business and efficiency.
- 9. Farm Labour: Measures of labour efficiency, Factors affecting labour eggiciency.
- 10. Farm Record: Farm Inventory: Valuation, Depreciation and net worth statement.

Paper III-Research Mathodology

- 1. Nature and purpose of Research: Pure and applied research, Deduction and Induction method.
- 2. Scientific Method: Methodological and Technique orientation uses of theory substantive and methodological objectives, Illustrati of steps involved in research studies.
- 3. Developmetn of working hypotheses, properties of hypotheses source of hypotheses, research problems and hypotheses.
- 4. Models and methods in agricultural economics research: model in research-Behavioural research and policy research; errors expectation and model spacifications; model building in research modeling choices detail expectation, time, scope of until an decision behaviour.
- 5. Decision problems in agricultural economics research informations requirements implied by alternative specifications of deciation models, strategies in decision model, linear programming model and methodological comments.
- 6. Observations, Concepts of Measurement, Qualitatigve and Quantitative measurements, observational process, criteria for choice amoung observational alternatives-historical, experiment and survey, rule of observation.
- 7. Planning of research study, Explantation and decision problems criteria for choice.
- 8. Data collection and processing:
 - a. Historical data, properties of historical Date Regression problem with time series.
 - b. Experimental methods: Types of experiments, selecting on experimental system, identifying elements in the experiment and desgning experiments.
 - c. Survey method : Types of survey, Sources of survey error conception and emplication, Design alternatives-observational units, population boundring sampling units and frame sampling criteria, conduct problems, conduct alternatives.
- 9. Interpretation, presentation and use of research results,
- 10. Development of social science research result with special reference to agricultural economics in India, Problems and prospects of agriculture Economics research in India

Paper IV-Agricultural Cooperation (Marketing and Finance)

- 1. Cooperation: Meaning and concepts, Principles of cooperation. Economics Planning and cooperation. Role of cooperatives in Agricultural development.
- 2. Cooerative Marketing- Meaning and objectives, Cooperative Marketing structure, Funtions and Process of Marketing cooperatives, Cooperative Marketing and Plan.
- 3. Market Integration : Concept and effect, Cooperative Marketing and Maket Integration. Marketing efficiency, Cooperative marketing and Marketing efficience. Effeciency of cooperative marketing and marketinf costs and price spread.
- 4. Cooperative Marketing of Farm Outpurs:- Goodgrains Sugarcane, Milk, Fruit, Vegetables etc. Cooperative Marketing of Farm Imputs. Fertilizers, Seeds, Pesticides. Farm machinery etc. Cooperative policies and strategies.
- 5. Management of cooperative