RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

SYLLABUS FOR COMPETITIVE EXAMINATION FOR THE POST OF ASSISTANT PROFESSOR IN AGRICULTURE ECONOMICS FOR COLLEGE EDUCATION DEPARTMENT

PAPER – II

Unit 1: Agricultural Finance -

Importance of agricultural finance; objectives, functions and principles of agricultural finance; sources of capital acquisition; rural credit structure- demand, supply, credit-gap; classification of agricultural credit – sources and forms; cost of credit/ capital; credit appraisal- 3Rs, 3Cs and 7Ps of credit, estimation of credit requirement; reforms in agricultural credit policy; financial system – NABARD, commercial banks, cooperatives- cooperative movement in India- organization, structure and development of different types of cooperatives in India, RRBs, Micro-Finance Institutions (MFIs), NGOs, and SHGs; innovations in agricultural financing-microfinance, Kisan credit cards; e-banking.

Unit 2: Project Management –

Definition and characteristics of projects; need for project approach for agricultural development; SWOT analysis and project identification, project life cycle, project feasibility- technical, financial and economic feasibility; social cost-benefit analysis; project risk analysis; project scheduling and resource allocation; financial and economic appraisal/measures, choice of discount rate, Net Present Value (NPV), Internal Rate of Return (IRR), Benefit-Cost Ratio (BCR); networth analysis – PERT & CPM; fundamentals of accounting and book-keeping; analysis of financial statements- balance sheet, income statement, cash flow statement, etc.

Unit 3: Agricultural Marketing and Price Analysis -

Concepts of agricultural marketing; marketing functions- buying and selling, processing, transportation, financing, grading, market information, storage and warehousing; channels of marketing agricultural produce-price spread and efficiency, structure, conduct and performance analysis; market integration; marketing institutions- role and functions; government interventions including administered price policy; regulated markets, farmer-producer companies, market segmentation, supply chain and value chain analysis in agricultural commodities, buffer stock operations, price stabilization measures and policies etc; use of information technology and market intelligence, price forecasting, marketing of agricultural inputs, role of private sector in input and output marketing; forward trading and futures market; e-NAM and marketing under e-NAM, commodity boards and contract farming; marketed surplus models; competitive and comparative advantage in trade, trade policies, models and agreements; regulations and reforms for marketing and trade, WTO, SPS measures and competitiveness; ecological concerns and marketing ethics.

Unit 4: Operations Research and Research Methods -

Importance and scope of research in agricultural economics, objective, types and process of research; role and uses of quantitative technique in business decision making; sampling techniques and sample size determination; sampling and non-sampling errors; index numbers; hypothesis- meaning, types and testing. Data analysis, ANOVA, factor analysis, measures of central tendency, measures of variation, skewness and kurtosis; correlation and regression, discriminant and dummy variable analysis; OLS, MLE estimation- assumptions and their violations, properties; simultaneous equation systems- identification and estimation; Linear programming- objective, assumptions, formulation of linear programming problem, simplex method- primal and dual problems, role of business decision making models.

Unit 5: Econometrics-

Nature and scope of econometrics: relationship between economic theory, mathematical economics, models and econometrics, methodology of econometrics; regression analysis; two variable regression– assumptions, estimation and interpretation; assumptions and estimation of OLS and their properties – extensions to multi-variable models; multiple regression, estimation and interpretation; violation of assumptions– identification, consequences and remedies for multi-collinearity, heteroscedasticity, autocorrelation; data problems and remedial approaches; model mis-specification; use of dummy variables; types and estimation of simultaneous equation models; identification problem.

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Note: - Pattern of Question Paper

1. Objective type paper
2. Maximum Marks: 75
3. Number of Questions: 150
4. Duration of Paper: Three Hours
5. All Questions carry equal marks.
6. Medium of Competitive Exam: Bilingual in English & Hindi
7. There will be Negative Marking.