

No. MZU/Eco-2/Admission- PhD/2023

Dated 14th August 2023

PhD ADMISSION NOTICE

This is to inform all candidates for PhD programmes in the Department of Economics, Mizoram University, that the Admission Entrance Test will be conducted online with video coverage on 21st August 2023 at 11:00 AM.

An entrance test will be conducted as per UGC Regulation 2016 that 50% will consist of research methodology and 50% on the general awareness of the candidates on the subject (Economics). The entrance test will be conducted using descriptive questions to be answered within a duration of 3 hours. The test will serve as a qualifying test with qualifying marks of 50%. The syllabus for the test is given in the Annexure.

Further information regarding the test will be given to the candidates via Whatsapp/Email.



(Prof. GIRIBABU M)
Head of Department

ENTRANCE TEST SYLLABUS

Section A: General Awareness of Economics Subject (50 Marks)

1. Elasticities (price, cross, income) of demand — theoretical aspects and empirical estimation; elasticity of supply; Theories of demand — utility; indifference curve (income and substitution effects, Slutsky theorem, compensated demand curve); Revealed preference theory.
2. Production function — short period and long period; law of variable proportions and returns to scale; Isoquants — Least cost combination of inputs; Returns to factors; Economies of scale; Elasticity of substitution; Cobb-Douglas and CES production functions and their properties
3. Price and output determination - perfect competition; Monopoly, price discrimination; Monopolistic competition, duopoly and oligopoly (Cournot and Stackelberg's solution) and collusive (Cartels and mergers, price leadership).
4. Consumption function – Keynes, Duesenberry, Friedman, Modigliani. The Acceleration principle and the theory of Investment.
5. Classical approach to demand for money – quantity theory approach, Fisher's equation, Cambridge quantity theory; Keynes' approach.
6. Neoclassical and Keynesian views on Interest; The IS-LM model: Extension of IS-LM model with government sector. Theory of inflation - Classical, Keynesian and Monetarist approach; Structuralist Theory of Inflation: Phillip's curve analysis.
7. Growth models - Harrod and Domar, Solow and Joan Robinson and Cambridge criticism of Neo-classical analysis of growth. Theories of growth and development – vicious circle of poverty, circular causation, big push, balanced and unbalanced growth, critical minimum effort thesis.
8. The pure theory of international trade — Theories of absolute advantage, comparative advantage and opportunity costs; Theorem of factor price equalization; Heckscher-Ohlin theory of trade, Leontief paradox. Balance of payments; Equilibrium and disequilibrium in the balance of payments;
9. Basic Characteristics of the Indian Economy as a Developing Economy; Broad Demographic Features of Indian Population; Poverty and inequality; Sustainable Development; Role of state.
10. Land reforms in India, Technological Change in Agriculture; Objectives and Strategy of Planning in India- Planning Experience; Failures and Achievements of Plans. Globalization. Economic reforms, Sustainable Development.

Section B: Research Methodology

Part A: Writing & Interpretation Skills (20 Marks)

Essay Writing (350-500 words) on any topic on economic policy, reforms, economic problems, industrialization, current events, political economy, etc.

Part B: Quantitative Techniques (30 Marks)

1. Matrices. Basic operations of matrices, determinants, matrix inversion, rank of a matrix, solution of simultaneous equations using Cramer's Rule and matrix inversion.
2. Differentiation & Integration; Interpretation of revenue, cost, demand and supply functions; Partial derivatives. Problems of optimizations in single and multivariate functions; Unconstrained and constrained optimization in simple economic problems. Simple rules of integration and its application to consumer's surplus and producer's surplus, application of integration in the demand, cost, and revenue analysis.
3. Data collection: nature of data (primary & secondary data), methods of primary data collection (observation, questionnaire, interview, etc), processing, tabulation and presentation of data.
4. Sampling- concepts and various types. Parameter and estimator; point and interval estimations; desirable properties of good estimator (unbiasedness, minimum variance, consistency, efficient and BLUE). Methods of Estimation – OLS and MLE, different types of sampling – simple random sampling, stratified random sampling, systematic and cluster sampling, determination of sample size.
5. Assumptions and limitations of simple correlation and regression analysis; Spearman's rank correlation. Concept of least squares and the lines of regression; standard error of estimates and coefficient of determination; the concepts of Partial and Multiple Correlation and Regression.
6. Hypothesis testing- standard error, one-tailed and two-tailed test, level of significance, Type-I and Type-II errors; parametric & non-parametric tests. Testing of statistical hypothesis – Z-test, t-test, chi-square test and F-test.