

ADMISSION NOTICE

This is for information to candidates seeking admission in *M.Phil* programme in the Department of Economics, Mizoram University that

1. Admission test will be conducted according to the following schedule –

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| a. Date of Entrance Test | : | 16th July 2019 @ 11:00 AM |
| Venue | : | Dept. of Eco., MZU |
| b. Interview/Viva Voce | : | 16th July 2019 @ 1:00 PM |
| Venue | : | HoD Chamber, Dept. of Eco., MZU |

2. Entrance Test will consist of two papers carrying equal weightage such as (i) Research Methodology, and (ii) General Awareness of the candidates on the subject (Economics). All questions will be on conventional pattern to be answered within 2 hrs. The syllabus for the test is given in the Annexure.

3. Interview-cum-viva voce will be conducted in which the candidates will be tested on their awareness of the subject. They will also be required to make presentations on their research area/interest, and tentative research proposals before the departmental research committee. Final selection will be done as per the existing regulations.

sd/-
(DR. LALHRIATPUII)
Head of Department

DEPARTMENT OF ECONOMICS, MIZORAM UNIVERSITY
Syllabus for MPhil Entrance Test, 2019

Section A
GENERAL AWARENESS ON ECONOMICS SUBJECT

Module I: Selected Topics in Micro and Macroeconomics Theory

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.

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
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).

Consumption function – Keynes, Duesenberry, Friedman, Modigliani. The Acceleration principle and the theory of Investment. Classical approach to demand for money – quantity theory approach, Fisher's equation, Cambridge quantity theory; Keynes' approach.

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.

Module II: International Economics, Growth and Indian Economy

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, Leontif paradox. Balance of payments; Equilibrium and disequilibrium in the balance of payments; The process of adjustment under systems of gold standard, fixed exchange rates and flexible exchange rates;

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.

Basic Characteristics of the Indian Economy as a Developing Economy; Broad Demographic Features of Indian Population; Poverty and inequality; Sustainable Development; Role of state.

Land reforms in India, Technological Change in Agriculture; Objectives and Strategy of Planning in India- Planning Experience; Failures and Achievements of Plans. Globalization.

Principles of taxation - ability-to-pay principle and the benefit principle, The theory of optimal taxation; Excess burden or the welfare cost of taxation. Indian Tax System – structure of direct and indirect taxes, new tax regime – VAT & GST.

Section B

RESEARCH METHODOLOGY

Module I : Mathematical Techniques for Economic Analysis

Matrices. Basic operations of matrices, determinants, matrix inversion, rank of a matrix, solution of simultaneous equations using Cramer's Rule and matrix inversion

Input–Output Analysis. Linear Programming – concepts and formulation of LP problem, Solution of Linear Programming through graphical methods. Introduction to Game Theory- concepts, strategies and finding of game value.

Rules of differentiation; Interpretation of revenue, cost, demand and supply functions; Elasticity's and their types; Multivariate functions – Rules of Partial Differentiation and Interpretations of 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.

Module II: Techniques of Statistical Analysis

Data collection: nature of data (primary & secondary data), methods of primary data collection (observation, questionnaire, interview, etc.), processing, tabulation and presentation of data.

Theory of Probability. classical and axiomatic approach to probability; theoretical distributions– Binomial, Poisson and Normal Distributions.

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.

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.

Key concepts of 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.