

SYLLABUS FOR MSQE Admission Test 2024

Syllabus for Mathematics:

Algebra: Binomial Theorem, AP, GP, Series, Permutations and combinations, Theory of polynomial equations.

Linear Algebra: Vector spaces, Linear transformations, Matrix representations and elementary operations, Systems of linear equations, Eigenvalues.

Calculus: Functions, Limits, Continuity, Differentiation of functions of one or more variables, Unconstrained Optimization, Definite and Indefinite Integrals, Integration by parts and integration by substitution, Convexity and quasi-convexity, Constrained optimization of functions of not more than two variables, Implicit function theorem, Homogeneous and homothetic functions.

Syllabus for Statistics:

Elementary probability theory, Measures of central tendency, Dispersion, Correlation and regression, Probability distributions, Standard distributions: Binomial and Normal.

Syllabus for Microeconomics:

Theory of consumer behaviour, Theory of production, Market structure under perfect competition, Monopoly, Price discrimination, Duopoly with Cournot and Bertrand competition, Elementary strategic interaction, Public goods, Externalities, General equilibrium, Welfare economics.

Syllabus for Macroeconomics:

National income accounting, Simple Keynesian Model of income determination and the multiplier, IS-LM Model, Models of aggregate demand and aggregate supply, Money, banking and inflation, Phillips curve, Elementary open economy macroeconomics, the Harrod-Domar Model, and the Solow Model.