

M.Sc. Economics Admission 2023-24
St. Xavier's College (Autonomous), Kolkata

Paper Structure: The paper structure for the admission test will be as follows:

Time: 2 ½ Hours

| Type of Questions | No. of Questions to be Answered | Marks Allocated to each Question | Total |
|-------------------|---------------------------------|----------------------------------|-----------|
| MCQ type | 10 | 2 | 10x2 = 20 |
| Short questions | 10 | 8 | 10x8 = 80 |
| | | | 100 |

Syllabus for Admission Test:

1. Microeconomics: Theory of consumer behavior; theory of production; market structure under perfect competition; monopoly; price discrimination; monopolistic competition; duopoly with Cournot and Bertrand competition; welfare economics.

2. Macroeconomics: National income accounting; simple Keynesian model of income determination and the multiplier; IS-LM model; models of aggregate demand and aggregate supply; Solow model of growth; money banking and inflation.

3. International Economics: Ricardian trade theory; Heckscher-Ohlin trade theory; commercial policy: tariff and quota; Mundell-Fleming model.

4. Statistics: Measures of central tendency; measures of dispersion; correlation and regression; probability theory; random variables – discrete and continuous, expectation and variance of random variables; univariate probability distribution – Binomial, Poisson, Rectangular and Normal; statistical inference – estimation (point and inference), properties of estimation, hypothesis testing (Type I and Type II errors).

5. Econometrics: CLRM – specification of the model – assumptions – linearity in variables and parameters, estimation of error variance; goodness of fit – R^2 – coefficient of determination; inferences in the linear regression model – confidence interval of the parameters and testing of hypothesis.

6. Mathematics: Concept of sets – relationship between sets, operation on sets; relations and functions – functions of two or more independent variables; matrices and vectors – matrix operations and vector operations; determinants; the concept of limit; continuity and differentiability of a function; partial differentiation, total differentiation; derivative of implicit functions; optimization – the case of more than one choice variable; optimization with equality constraints; homogeneous functions; indefinite and definite integrals (properties); improper integrals.
