M.Sc. Economics Admission 2025 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 | Marks Allocated to | Total |
|-------------------|------------------------|--------------------|-----------|
| | Answered | each Question | |
| 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.
