M.Sc. Economics Admission 2024
St. Xavier’s College (Autonomous), Kolkata

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

- **Time**: 2 ½ Hours

<table>
<thead>
<tr>
<th>Type of Questions</th>
<th>No. of Questions to be Answered</th>
<th>Marks Allocated to each Question</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCQ type</td>
<td>10</td>
<td>2</td>
<td>10x2 = 20</td>
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<tr>
<td>Short questions</td>
<td>10</td>
<td>8</td>
<td>10x8 = 80</td>
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<td>100</td>
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</tbody>
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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.

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