MA Economics Entrance Examination ASHOKA UNIVERSITY

Syllabus

1 Statistics

<u>Topics</u>: Measures of Central Tendency and Dispersion; Elementary Probability Theory; Random variables; Special Discrete Distributions like Binomial, Hypergeometric and Negative Binomial; Special Continuous Distributions like Uniform and Normal; Joint Discrete Distributions; Sampling Distributions, Interval, Point Estimation and Hypothesis Testing for Population Means, Proportions and Variances.

<u>Recommended Textbooks</u>: (i) "Probability and Statistics for Engineering and the Sciences" by J.L. Devore. Seventh Edition. (ii) "John E. Freund's Mathematical Statistics with Applications" by Miller and Miller. Eighth Edition.

2 Analytical Reasoning

This section will test candidates on their ability to study and process a given set of information logically to arrive at a decision, or make an inference, or find patterns. Answering these questions will not require prior training in any of the established disciplines.

3 Economics

3.1 Microeconomics

<u>Topics</u>: Choice, Preferences and Utility; Consumer Theory; Producer Theory; Perfect Competition; Monopoly and Price Discrimination; Edgeworth Exchange Economies; Welfare Economics; Externalities.

<u>Recommended Textbook</u>: "Intermediate Micro Economics" by Hal Varian. Eighth Edition

3.2 Macroeconomics

<u>Topics</u>: National income accounting; Keynesian Model of income determination and the multiplier; IS-LM Model; Models of aggregate demand and aggregate supply; Rational expectations; Solow model of growth; Money, banking and inflation.

<u>Recommended Textbook</u>: "Macroeconomics" by Dornbusch, Fisher and Startz. Eleventh Edition.

4 Mathematics

<u>Topics</u>: Elementary Set Theory and Logic; Functions; Limits; Continuity; Differentiation; Integration; Single and Multi-variable Calculus, Linear Algebra, Constrained optimization.

<u>Recommended Textbook</u>: "Essential Mathematics for Economic Analysis" by Sydsaeter, Hammond and Strom. Fourth Edition