

**MASTER OF BUSINESS ADMINISTRATION
IN FINANCIAL MARKETS (MBAFM)**

Term-End Examination

00845

December, 2014

**MCT-072 : QUANTITATIVE AND STATISTICAL
TECHNIQUES FOR FINANCIAL MARKETS**

Time : 3 hours

Maximum Marks : 100

*Note : Attempt any **five** questions. All questions carry equal marks.*

1. What are Discrete and Continuous random variables ? How is the expected value and variance of a discrete random variable calculated ? 20

2. Explain the following : 10+10=20
 - (a) Normal Distribution
 - (b) Binomial Distribution

3. What do you understand by 'Expected value' and 'Expected return' ? Explain why expected, required and realized returns are often different ? 20

4. Explain the following in detail : 10+10=20
- (a) Delta
 - (b) Gamma
5. Describe the basic arbitrage pricing theory model of two factors. 20
6. Explain the CAPM theory and its validity in the Capital Market. 20
7. What are the factors affecting options' prices ? How are the upper and lower bounds for options' prices calculated ? 20
8. What do you understand by hedging ? Discuss the various hedging strategies using futures and options. 20
-