

MBAFM / MBAMAFCI

Term-End Examination

June, 2012

00803

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

Time : 3 hours

Maximum Marks : 100

Note : Attempt any five questions.

1. Explain the fundamental Betas with appropriate examples. 20
2. What is APT and give a simple proof of APT with appropriate example ? How will you estimate and test APT ? 20
3. The 'risk premium', that is the maximum amount that an individual is prepared to pay to convert a random distribution into a perfectly certain income, measure the degree of risk associated with such a distribution for all investors. 20
 - (a) Is this statement correct ?
 - (b) Prove your answer graphically using hypothetical numerical example.

4. "An investor who ignores risk will diversify his portfolio; an investor who ignores the portfolio's expected returns will diversify his portfolio." What is your opinion of these two statements? Support your answer with graphical presentation. 20
5. The efficiency curves of an American and an European investor are not necessary the same even if they are confronted by the same investment opportunities. Appraise. 20
6. (a) Distinguish between a close-end and open-end investment company. What are the investment objectives of open-end investment company. 10
- (b) "In a perfect market there is no need for mutual funds." Appraise. 10
7. (a) What is the assumption underlying a perfect capital market? How would you go about testing the realism of these assumption? 10
- (b) Define the 'market line for the case of single stock and multiple stock portfolio? 10
- (i) When the borrowing rate equals the lending rate?
- (ii) When the borrowing and lending rate differ?
8. Define the maximum expected return criterion. What is the major shortcoming of this criterion for making decision of risk? 20