

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

Term-End Examination

December, 2012

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

Time : 3 hours

Maximum Marks : 100

Note : Attempt any five questions.

1. Explain measuring the tendency of Beta to regress towards one-Blume's Technique. Explain Beta's as forecasting correlation coefficients. 20
2. What is APT and give a simple proof of APT with appropriate example ? Specify the influence affecting the return-generating process. 20
3. The TCS (two stage criterion) reduces the MVC (Mean-variance criterion) efficient set by systematically eliminating options with low variance. Appraise this statement and support your conclusion by giving appropriate numerical example. 20

4. Define and graph the efficiency locus for the two-asset case of bonds and cash. Why is an individual willing to hold part of his liquid reserve in the form of cash ? 20
5. "Since U.S. stock represent high return - low risk investments relative to the rest of world, an American investors should not include foreign stock in their portfolio". Appraise. 20
6. (a) Define "reward to variability" and "reward to volatility". Which of these indices provides the more general measure of performance ? 10
- (b) "In a perfect market there is no need for mutual funds". Appraise. 10
7. (a) It has been said that the prices of risky alternatives are determined in a perfect capital market as if there were only one investor. Do you agree ? Explain. 10
- (b) What is the general equilibrium relationship between risk (variance) and return which must be hold for every risk assets in a perfect market ? 10
8. "A risk averter will enter a fair game of chance". Prove this statement graphically. In your answer, indicate the 'risk premium' necessary to induce him to agree to pay. 20