Portfolio Management

Paper: FM – 407

Time: Three Hours **Maximum Marks: 70**

Note:- Attempt FIVE questions in all. Question No. 1 is compulsory. All questions carry equal marks.

1. Write Brief explanation of:
   (i) Beta
   (ii) Risk Premium
   (iii) Market Portfolio
   (iv) Diversification
   (v) Characteristics line
   (vi) Passive Bond Portfolio Strategies
   (vii) Active bond portfolio strategies
2. Mr. Ram is considering the purchase of three securities A,B and C for the next year. The returns of the securities depend on next year's state of stock market. The estimated rates of return are shown in the table:

State of Market	**Probability of occurrence**	**Rates of Return of Securities**		
		A	B	C
Recession	0.25	10%	9%	14%
Average	0.50	14%	13%	12%
Boom	0.25	16%	18%	10%

Find:

(a) Each stock's expected rate of return, standard deviation and co-efficient of variation.
(b) If Mr. Ram invests one third on each security what would be his portfolio return?
(c) What are the co-variances between security A and B, Band C and C?

3.(a) What is the Key assumption of the single-index model?
(b) With the single-index model, the risk of a security consists of two components. What are they?

4. Write a detailed note on Arbitrage pricing Theory (APT).

5. Explain the concept of efficient:
(a) Frontier in the context of portfolio selection.
(b) What is meant by optimal portfolio? How is it identified?

6. (a)What are the advantages of adopting CAPM model in the portfolio management?
(b) Distinguish between security market line and capital market line.

7. "Formula plans help the investor to overcome being emotionally attached to the stock". Explain.

8. You are given the following historical performance information on the capital market and mutual fund:

Year	**Mutual Fund Beta**	**Mutual Fund return (%)**	**Return on market index (%)**	**Return on govt. securities (%)**
1.	0.90	-3.00	-8.50	6.50
2.	0.95	1.50	4.00	6.50
3.	0.95	18.00	14.00	6.00
4.	1.00	22.00	18.50	6.00
5.	1.00	10.00	5.70	5.75
6.	0.90	7.00	1.20	5.75
7.	0.80	18.00	16.00	6.00
8.	0.75	24.00	18.00	5.50
9.	0.75	15.00	10.00	5.50
10.	0.70	-2.00	8.00	6.00

Calculate the following risk adjusted return measures for the mutual fund:

(a) Reward-to-variability ratio.
(b) Reward-to-volatility performance.