

Serial No. of Question Paper

: 8685

Unique Paper Code

: 61017926

Name of the Paper

: Investment Analysis and Portfolio Management

Name of the Course

: Bachelor of Management Studies (BMS)

Semester

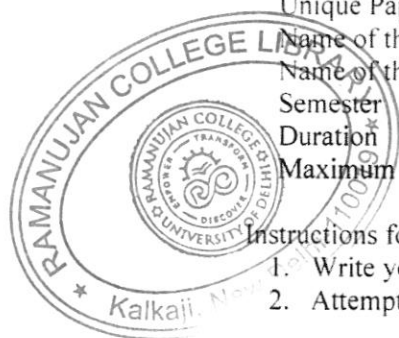
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Duration

: 3 hours

Maximum Marks

: 75 Marks



Instructions for candidates:

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any 5 questions. All questions carry equal marks.

1. (a) A Rs1000 par value bond bearing a coupon rate of 8 percent will mature after 5 years. What is the value of the bond, if the discount rate is 6 percent. (5)
- (b) A 3 year bond with face value of Rs 1000 pays an annual coupon of 8% and has yield to maturity of 6%. Calculate the Macaulay duration. (5)
- (c) How does the EIC framework help in assessing investment risks? (5)
2. (a) ABC Ltd forecasts that its dividend will grow at 20% per year for the next three years before settling down at a constant 5% forever. Current dividend is Rs 2 and expected rate of return is 10%. What is the value of the stock now? (5)
- (b) You have a portfolio with three stocks:
 - Stock X has a beta of 1.3 and represents 40% of the portfolio.
 - Stock Y has a beta of 0.9 and represents 30% of the portfolio.
 - Stock Z has a beta of 1.8 and represents 30% of the portfolio.
 If the risk-free rate is 3% and the expected market return is 11%, calculate the portfolio's beta and the expected return of the portfolio. (5)
- (c) Briefly explain Efficient market hypothesis. (5)
3. (a) You have a portfolio consisting of two stocks, A and B.
 - Stock A has an expected return of 10%, standard deviation of 15% and makes up 50% of the portfolio.
 - Stock B has an expected return of 14%, standard deviation of 25% and makes up 50% of the portfolio.
 Correlation coefficient between Stock A and Stock B is 0.5
 What is the Standard deviation of the portfolio? (5)
- (b) Consider a stock with a beta of 0.9. The risk free rate is 5% and the expected market return is 12%. If the stock is currently expected to return 10%, is it a good investment according to the SML? (5)
- (c) Briefly explain Asset allocation pyramid. (5)

4. (a) With respect to the following information given in the table find out the covariance between security C and market.

State	Probability	Return of Security (₹%)	Return of Market (%)
Recession	0.2	15	10
Normal	0.4	14	16
Boon	0.4	26	24

(5)

- (b) Assume the risk-free rate is 2%, security has a correlation of 0.8 with the market index and a standard deviation of 16% while the standard deviation of the market is 12%. If the market expected return is 8%, what is the expected return of the security? (5)

- (c) Explain different types of Mutual funds available for investment. (5)

5. (a) Rank the three funds given below with the help of Treynor and Sharpe index.

Growth Fund	Return(%)	Beta	α
X	15	1.5	12
Y	17	1.6	14
Z	13	.75	11
R_f	9		

- Is there any difference in the ranking according to these measures? If so why? (5)

- (b) Following table provides the details about 3 portfolios. Find out the difference between the actual and expected return using Jensen's alpha. On the basis of your calculation rank them.

Portfolio	Return on Portfolio(%)	Portfolio Beta	Risk Free Interest
A	15	1.3	6%
B	12	0.9	6%
C	18	1.6	6%
Market Index	11	1.0	6%

(5)

- (c) What is the Security Market Line (SML) and how is it related to CAPM? (5)

6. (a) Consider three assets in a portfolio composed of equal investments in each. Following information is available with respect to them :

Security	Return	Standard Deviation
A	8%	2%
B	15%	16%
C	12%	8%

P.T.O.

Correlation coefficient between A and B is 0.4, B and C is 0.8 between A and C is 0.6.

Find out the expected return and standard deviation of the portfolio. (5)

(b) Briefly explain how random walk theory relates to the Efficient Market Hypothesis?(5)

(c) Explain three types of market trends according to the Dow theory? (5)