

an allocation of 80% and a standard deviation of 16%, and asset B has an allocation of 20% and a standard deviation of 25%. If the correlation coefficient between assets A and B is 0.6, find the risk as per mean variance model. (4)

(b) A 13% preference share of XYZ Ltd is priced at 110, and another 15% preference share of ABC Ltd is priced at Rs 160. Which share is good for investment? (4)

(c) If the correlation between an asset and the market is 0.6, the standard deviation of the asset is 18%, and the standard deviation of the market is 14%, what is the beta of the asset? (4)

(d) Explain the M.E. Porter model of industry analysis (3)

[This question paper contains 8 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 7540

Unique Paper Code : 61017926

Name of the Paper : Investment Analysis and Portfolio Management

Name of the Course : **Bachelor of Management Studies (BMS), 2023 (LOCF)**

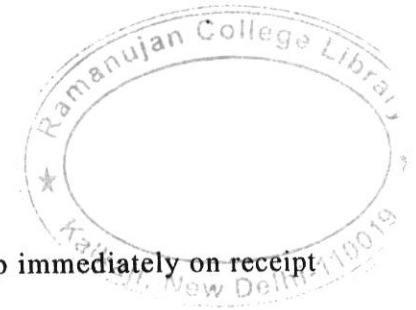
Semester : V

Duration : 3 Hours

Maximum Marks : 75

**Instructions for Candidates**

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



3. (a) A risk averse investor is holding stock X1. He is considering to add X2 and/or X3 to increase return, but he is worried that risk will also increase. What do you advise when the following information is given? (4)

| Stock | Ex. Return | St. Dev. | Correlation with X |
|-------|------------|----------|--------------------|
| X1    | 10%        | 5        | 1.0                |
| X2    | 12%        | 7        | 0.5                |
| X3    | 13%        | 9        | 0.7                |

- (b) Stock A has expected return of 7.8% and beta of 0.7. Stock B has an expected return of 10.20% and a beta of 1.3. The risk free rate is 5%.

(4)

- A. Plot the security market line.
- B. What is the expected return on the market?
- C. What is the expected return of C as per CAPM having beta of 1.1.

- (c) ABC Ltd is evaluating a project which has a beta value of 1.5. The return on the market Index is 15%. The return on treasury bills is 5%. What is the cost of equity? (4)
- (d) What are the various assumptions of the Capital Asset Pricing Model? (3)

4. (a) In what proportion should the following securities be combined to minimize risk? What will be the portfolio risk and return?

|                    | Stock X | Stock Y |
|--------------------|---------|---------|
| Return %           | 8       | 10      |
| Standard deviation | 6       | 8       |
| Correlation        | +1      |         |

(4)

- (b) A portfolio manager earned an average annual return of 12%. The beta of the portfolio is 0.9, and the volatility of returns is 25%. The average annual return for the market index was 14%, and

the standard deviation of the market returns is 30%. The risk-free rate is 5%. Calculate the Treynor measure for the portfolio. (4)

- (c) Mukesh wants to decide between two mutual funds X and Y. From the financial reports, he is able to calculate the average returns and the standard deviations for the funds. The current risk free rate of interest is 7 per cent. Using the Sharpe index compare the performance of X and Y funds.

|                    | X   | Y   |
|--------------------|-----|-----|
| Average Return     | 19% | 17% |
| Standard Deviation | 21  | 16  |

(4)

- (d) Explain the candle stick chart with some example.

(3)

5. (a) The expected return on the market is 20% and standard deviation is 30% and return on the risk-free asset is 5%. Design the portfolio as per CAPM with: (4)

- (d) Briefly explain leading, lagging and coincident indicators. (3)

2. (a) A 5 year bond with face value Rs 100 and 10% coupon rate is currently available for Rs 90. It is callable after 3 years at Rs 110. What is the current yield, and yield to call? (4)

- (b) CLD Ltd forecasts that its dividend will grow at 20% per year for the next four years before settling down at a constant 8% forever. Current dividend is Rs 12 and expected rate of return is 15%. What is the value of the stock now? (4)

- (c) The risk-free rate is 5% and the market risk premium is 10%. The beta of Stock A is 1.4 and the standard deviation is 30%. What is the expected return of Stock A according to the CAPM. (4)

- (d) Briefly explain Efficient market hypothesis. (3)

1. (a) A Rs100 par value bond bearing a coupon rate of 12 percent will mature after 5 years. What is the value of the bond, if the discount rate is 15 percent.

(4)

- (b) Mr. X needs Rs 4,00,000 after 2 years. He is considering investment in the following two bonds.

Bonds A with 7% coupon, 4 years to maturity and current yield 10% available for Rs 905.

Bond B with 6% coupon, 1 year maturity and current yield 10%, available for Rs 943.

How much money should Mr. X invest in each bond? And how many of each bond will he purchase?

(4)

- (c) A company is currently paying a dividend of Rs 2 per share. The dividend is expected to grow at a 15% annual rate for three years, then at 10% rate for the next three years, after which it is expected to grow at a 5% rate for ever. What is the present value of the share if the capitalization rate is 9%?

(4)

A. No standard deviation

B. Standard deviation of 15%

C. Standard deviation of 30%

D. Standard deviation of 45%

- (b) On Monday Sensex opened with 17000 points and closed at 17500 points on Friday. The ABC stock has 2.5 alpha and 1.7 beta values and currently trading at Rs 1200. What will be the expected return and the new price of ABC stock? (4)

- (c) Stock A and Stock B are two real estate stock in a portfolio having a return of 6% and 11% and weight of stock A is 54% and the weight of Stock B is 46%. The standard deviation of A and B are 0.1 and 0.25. Also the correlation between the two stocks is 0.1. Calculate variance of the portfolio. (4)

- (d) Briefly explain the dow theory? (3)

6. (a) A portfolio is made up of two assets. Asset A has