2025

MBA 3rd Semester Examination

MBA

Paper : 306F

[Investment Analysis and Portfolio Management]

Full Marks : 100 Time : Three Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

Group - A

Answer any ***eight*** questions : 5×8=40

1. Explain in brief the characteristics of securities.

2. Enumerate the major points of difference between capital market and money market.

3. Explain the concept of investment. How is it different from speculation? 3+2

4. Discuss the Dow theory.

5. Mr. John buys 100 shares of A Ltd. at a price of Rs. 225 per share. He holds the share for four years after which he sold the investment for Rs. 70000. During

this period, he received dividends of Rs. 2000 on his holding. You are required to compute the holding period rate of return and annualised return. 3+2

6. Is there any relationship between number of securities in a portfolio and total risk? Explain with the help of a diagram.

7. Explain the terms 'business risk' and 'financial risk'.

8. The following information about security Z is given to you :

Year	Return of N (%)
2022	15
2023	10
2024	12
2025	13

Compute the standard deviation of the security.

9. What is characteristic line? How is it useful for investors? 3+2

10. Determine the expected return of security I if the expected return of A (beta = 1.90) and that of B (beta = 1.65) are 14.50 and 13.25% respectively. It is given that the covariance of I and the Sensex is 160 and the variance of the market is 80.

11. How do mutual funds diversify their investment? Why is it less risky than equity shares? 3+2

12. Compute the risk of security D based on the following information :

State of the economy	Probability	Return
1	20%	10%
2	30%	14%
3	10%	19%
4	40%	25%

Group - B

Answer any ***four*** questions : 10×4=40

13. (i) Explain the concept of bond duration.
Piku Ltd. issued bonds having face value of Rs. 1000 and coupon rate of 10%. If the bond is redeemable after 6 years at par, compute the bond duration assuming that the cost of capital of bond is 12%.

(ii) Why is valuation of bonds comparatively easier than that of equity shares? 7+3

14. (i) State the assumptions of CAPM.

(ii) Explain the CAPM equation and mention its importance. 5+(3+2)

15. (i) Narrate the importance of NAV in the case of mutual funds.

P.T.O.

(ii) Compute NAV in the following case :

Particulars	01.01.2023
Equity share holding: Holding U (1000 shares): Market price per share	Rs. 90
Equity share Holding Y (8000 shares). Market price per share	Rs. 250
Investment in bonds : Market value	5,00,000
Cash and cash equivalents	1,50,000
Short-terms liabilities	1,20,000
Long-term liabilities	5,50,000
Accrued income	1,02,000
Accrued expenses	80,000
No. of outstanding units	50,000

(iii) Write a short note on Sharpe ratio as a measure for evaluating mutual funds. 3+4+3

16. What do you understand by an efficient market? Distinguish between weak form and strong form of market efficiency. 4+6

17. (i) Mr. Pritam holds a portfolio having securities J and K which are in the ratio of 1:2. Their respective returns are 12% and 15%, whereas their variances are 81 and 225. If the correlation coefficient

between the securities is (-) 0.40, determine portfolio return and portfolio risk. Is the risk minimised in the given case? Show necessary computation.

(ii) What is spot interest rate in the case of a zero-coupon bond?

(iii) Compute spot interest rate of a zero-coupon bond that has face value of Rs. 1000 and is going to mature after two years at par. It is presently selling at Rs. 750. (1+3+2)+2+2

18. (i) Discuss the concept of efficient frontier.

(ii) State the concepts of active portfolio revision and passive portfolio revision. 6+4

Internal Assessment : 20 marks