

D 136301

(Pages : 4)

Name.....

Reg. No.....

THIRD SEMESTER M.B.A. DEGREE (REGULAR) EXAMINATION**JANUARY 2026**

M.B.A.

BUS 3EF 01—SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

(2024 Scheme)

Time : Three Hours

Maximum : 60 Marks

Part A*Answer all questions.**Each question carries 2 marks.*

1. Explain the advantages of Technical Analysis.
2. Define the systematic risk.
3. What do you mean by passive portfolio ?
4. Calculate the expected return using the following data :
Stock A : 24, - 12, 45, 57, - 8, 30
5. How do you explain the residual variance in portfolio management ?

(5 × 2 = 10 marks)

Part B*Answer any four questions from this Part.**Each question carries 4 marks.*

6. What is efficient frontier ? Explain.
7. Explain the assumptions of CAPM Model.
8. ABC Company issued face value of Rs. 100 bond at 10 % with maturity of 5 years. Using convexity, estimate the value of bond if YTM rate is at 10 %.
9. What is RSI ? Explain.

Turn over

10. The dividend per share and market price per share of ABC Corporation Ltd during the last five years are given below. Calculate the annual return for each year :

Year	:	0	1	2	3	4	5
Dividend	:	1.75	1.75	2.50	3.20	3.80	4.50
Share price	:	30	20	28	42	50	80

11. The particulars given are :

- a) Expected return of the market is 15% and equity's beta is 1.2 and risk-free rate of return is 8 %

b)

Factor	Market price of risk (λ %)	Sensitivity index (b)
Inflation	8	1.20
Industrial Production	4	0.90
Risk premium	6	1.30
Interest rate	5	1.10

What can you expect to offer as explanation for the difference in two estimates ?

(4 × 4 = 16 marks)

Part C

Answer any **three** questions from this Part.

Each question carries 8 marks.

12. Explain the modes of investments ?
13. What is the random walk hypothesis and how does it apply to stocks ?
14. Amitha has obtained the following information regarding his favourite stocks. He wants to invest in all the four stocks equally.

Stock	Alpha	Beta	Residual variance
1	1.28	1.60	55
2	1.11	1.07	41
3	2.49	1.39	23
4	0.48	0.89	36

Market variance is 25 % and expected market return is 20 %.

- i) What would be Amitha's portfolio return and risk ?
- ii) Can you advise her regarding the amount to be allocated on each security so as to enhance her earnings ?
15. Bharath Ltd earnings and dividend have been growing at a rate of 19 % p.a. This growth rate is expected to continue for 5 years. After that the growth rate will be 12 % for next 5 years. There after the growth rate is expected to be 7 % forever. Current year dividend is Rs. 3 and investors required rate of return is at 15 %. What is the intrinsic value of share ?
16. The returns of two assets under four possible states of nature are given below :

State of nature	Probability	Return on Asset-1	Return on Asset-2
1	0.10	- 7 %	12 %
2	0.40	17 %	15 %
3	0.30	20 %	18 %
4	0.20	25 %	21 %

- a) What is the standard deviation of the returns on asset 1 and asset 2 ?
- b) What is the covariance between the returns on asset 1 and asset 2 ?
- c) What is co-efficient of correlations between the returns on asset 1 and asset 2 ?

(3 × 8 = 24 marks)

Part D

Compulsory Question.

10 marks.

17. Case :

A portfolio manager summarizes the input from the macro and micro forecasters in the following table :

Micro Forecast			
Stock	Alpha (%)	Beta	Residual Standard Deviation (%)
1	9	1.8	48
2	- 6	1.0	35
3	4	0.7	28

Turn over

Macro Forecast		
Asset	Expected Return (%)	Standard Deviation (%)
T-bills	8	0
Market	18	20

- Calculate excess returns, residual variance for all the stocks.
- Construct optimal risky portfolio using Treynor's Black Model.
- What is Sharpe's measure for optimum portfolio and how much of it is contributed by active portfolio? What is M^2 ?

(10 marks)