

## MBA Degree (PT) V End Semester Examination- February, 2022

## 16-372-0512: Security Analysis &amp; Portfolio Management

(Regular)

Time: 3 Hours

Max. Marks: 50

**PART A***(Answer ALL questions. Each question carries 2 marks)*

1. Risk and return are keys to investment decision, why?
2. What is DEMAT account?
3. What is technical analysis?
4. Diversification can reduce risk. How?
5. What is efficient frontier?

(5X2=10)

**PART B***(Answer ANY FIVE Questions. Each question carries 4 marks)*

6. Kanika buys a five year 7 per cent bond at ₹ 99.48 (Face value ₹ 100). What is the simple YTM of the bond?
7. A stock costing ₹ 250 pays no dividend. The possible prices that the stock might sell for at the end of the year and the probability of each are:

Possible prices	Probability
200	0.10
230	0.25
250	0.35
280	0.20
310	0.10

- i. What is the expected return?
  - ii. What is the standard deviation of returns?
8. Compute the variance and standard deviation of a portfolio containing stock 1 and 2.  
 $r_{12} = 0.65$                        $\sigma_1 = 13$                        $\sigma_2 = 27$   
 $W_1 = 0.70$                        $W_2 = 0.30$

9. Given the following information:

	Portfolios			
	A	B	C	D
Beta	1.10	0.8	1.8	1.4
Return	14.5	11.25	19.75	18.5
SD (%)	20.0	17.5	26.3	24.5

- i. Risk free rate of return = 6 per cent
- ii. Market return = 12 per cent

**Calculate:**

- (a) Sharp ratio
- (b) Treynor ratio
- (c) Jensen ratio



10. Explain the concept and process of portfolio analysis.
11. Explain Dow Theory. How Eliot Wave Theory is different from Dow Theory?
12. Distinguish between Sharpe ratio and Traynor ratio.

(5X4=20)

**PART C**

*(Answer ANY TWO questions. Each question carries 10 marks)*

13. Given below are the historical performance information on the capital market and a mutual fund.

Year	Mutual fund	Mutual fund	Return on market	Return on Govt.
1	13.85	1.25	-10.00	4.76
2	28.00	1.20	21.00	4.21
3	35.00	1.18	11.05	5.21
4	11.25	1.20	-7.50	6.00
5	24.00	1.22	4.00	6.50
6	6.85	1.32	14.31	4.35
7	1.20	1.27	18.95	3.85
8	21.00	1.25	14.50	6.15
9	10.18	1.10	9.25	7.50
10	17.65	0.95	20.00	6.00

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

- a) Reward-to-variability ratio
- b) Reward-to-volatility ratio

Comment on the mutual fund's performance.

14. The variance-covariance matrix for three securities is given below:

Security	A	B	C
A	108	-56	94
B	-56	214	137
C	94	137	180

Calculate the standard deviation of a portfolio constructed with these three securities, the proportion of investment in each being:

A(0.20)      B(0.50)      C(0.30)

15. Portfolio evaluation essentially comprises of two functions, performance measurement and performance evaluation. Discuss

(2x10=20)

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