Reg. No.

III Semester M.B.A. (Day) Degree Examination, June/July - 2023
MANAGEMENT
Investment Analysis and Portfolio Management
(CBCS Scheme 2019 Onwards)
Paper : 3.2.1

Time : 3 Hours   Maximum Marks : 70

SECTION - A

Answer any Five questions from the following each question carries 5 marks.   (5×5=25)

1. "One of the factors that a portfolio manager has to keep in mind is the investor's taste for risk". Explain the concept of an 'risk averse' investor.

2. What are Money Market Instruments? Explain.

3. Briefly explain the difference between fundamental and technical analysis.

4. Stocks X and Y had the following returns over the past 5 years:

Year	Returns	
	X	Y
2018	9	11
2019	-10	-13
2020	5	9
2021	17	21
2022	21	15

Based on the above information create a portfolio of X and Y by assuming equal weights for both the stocks.

Also determine the Risk (variance, the standard deviation) and return on the portfolio.

5. An investor wants to choose either X or Y Company's stock. Both the companies are not paying dividends. X company stock is currently selling for Rs. 150 and Y for Rs. 200. At the end of the year ahead there is a probability for X to be sold either for Rs. 171 or Rs. 167 and Y either for Rs. 227 or Rs. 223. Which company's scrip should the investor buy? Justify your answer.

6. The XY company stock's return depends heavily on the market return, the beta being 1.4, the risk free rate of return is 8 percent and the market return is 15 percent.

    a) Determine the expected return for XY stock.

    b) What happens to expected return, if the market return increases to 20 percent?

    c) What happens to the return if beta falls to 0.90 while the other inputs remain the same?

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7. If A and B companies equity have the following risk and return.

$$E(R_A) = 14\% \qquad E(R_B) = 16\%$$
$$Risk_A = 22\% \qquad Risk_B = 25\%$$

Determine the weights of minimum risk portfolio and also compute the return and risk.

SECTION - B

Answer any **THREE** questions from the following each question carries **10** marks.

$$(3\times10=30)$$

8. What are the assumptions of Dow Theory? Explain different trends of stock market according to it.

9. Assume you have recently graduated as major specializations in finance and have been hired as a finance planner by ABC securities, a financial services company. You have been given the following information:

Year	Return % on SBI (Y)	Return % on Nifty Index (X)
2018	10	12
2019	12	15
2020	5	4
2021	2	2
2022	15	10

You have been asked to answer the following questions:

a) What is Beta Value?

b) What is Alpha Value?

c) What is residual variance of SBI and Nifty Index?

d) What is coefficient of correlation? Comment on your results with systematic and unsystematic risk.

10. The following table gives an analyst's expected return on two stocks for a particular market returns:

Market Return	Aggressive Stock	Defensive Stock
6%	2%	8%
20%	30%	16%

a) What are the betas of the stocks?

b) What is the expected return on each stock if the market return is equally likely to be 6% or 20%?

c) If the risk free rate is 7% and market return is equally likely to be 6% or 20%. What is the SML?

d) Calculate the alphas of two stocks.

11. Consider the following data for a particular sample period:

Particulars	Stock A	Stock B	Market
Average Return	2.76	7.56	1.63
Risk	6.17	14.89	8.48
Beta	0.69	1.40	1.00
Unsystematic Risk	1.95	8.98	0.00

Calculate the following performance measure for stocks and the market by using Sharpe, Jensen, Treynor's and Information Ratio. The Treasury bill rate during the period was 6%.

SECTION - C

Compulsory Case Study : (1×15=15)

12. A portfolio manager has got the following information about several stocks. He has to build an optimum portfolio for his client without short sales. The market index variance is 12 percent and the risk free rate of return is 7 percent.

Security	Expected Return	Beta	Residual Variance
A	22	1.0	35
B	20	2.5	30
C	14	1.5	25
D	18	1.0	80
E	16	0.8	20
F	12	1.2	10
G	19	1.6	25
H	17	2.0	30

Using Sharpe Single Index Model of Portfolio Optimization, Construct the optimum portfolio.