



M.Com. II Semester Degree Examination, October - 2023

COMMERCE

DSC8 : Security Analysis and Portfolio Management

(NEP)

Time : 3 Hours

Maximum Marks : 70

Note : Answer **any five** of the following questions with Question No. **1** is **compulsory**. Each question carries **Fourteen** marks.

1. The rate of return on stock B and the market portfolio for a 10 year period are given below : 14

Year	Return on Stock B (%)	Return on Market Portfolio (%)
2013	15	9
2014	16	12
2015	10	6
2016	-15	4
2017	-5	16
2018	14	11
2019	10	10
2020	15	12
2021	12	9
2022	-4	8

- (i) Calculate the beta for the Stock B.
- (ii) Establish the characteristic line for the stock B.
- (iii) What would be the return from Stock B if the market is expected to move up by 9 % in 2023 ?
2. “Fundamental analysis provides an analytical framework for rational investment decision-making”. Discuss. 14



3. Calculate covariance of each pair of securities and correlation coefficient from the following data. 14

Year	Return from Security X (%)	Return from Security Y (%)	Return from Security Z (%)
1	15	20	12
2	18	24	8
3	20	25	7
4	16	22	14
5	22	20	16

4. What do you mean by revision of portfolio ? Identify reasons and formula-plans for revision of portfolio. 14

5. The following is the historical performance information on the capital market and a mutual fund. 14

Year	Mutual fund return (%)	Mutual fund beta	Return on Market index (%)	Return on Govt. Securities (%)
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 :

- (i) Reward to Variability Ratio
- (ii) Reward to Volatility Ratio



6. What are price charts ? Describe the different types of price charts used by technical analyst. 14

7. The following data are available to you as portfolio manager : 14

Security	Estimated Return (%)	Beta	Standard Deviation (%)
A	30	2.0	50
B	25	1.5	40
C	20	1.0	30
D	11.5	0.8	25
E	10.0	0.5	20
Market index	15	1.0	18
Govt. Security	7	0	0

(i) In terms of the security market line, which of the securities listed above are underpriced ?

(ii) Assuming that a portfolio is constructed using equal proportions of the five securities listed above, calculate the expected return and risk of such a portfolio.

8. Write a note on the following :

(a) Forms of market under EMH

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(b) Efficient Frontier

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(c) Active strategy for revision of portfolio

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