PG/3rd Sem /COM/25

2025

M.Com. 3rd Semester Examination

COMMERCE

PAPER : COM-301

(Security Analysis and Portfolio Management)

Full Marks : 50 Time : Two Hours

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

COM - 301.1

(Marks : 20)

1. Answer any *two* questions : 5×2=10

(a) (i) Discuss the basic rule of investment (buy/sell) from the calculated present value of an equity share and its market value.

(ii) How may the valuation model be applied by an issuer company to calculate the discount/premium rate at the time of issue of a debenture? 2½+2½

(b) From the following information of risk and return about two securities, X and Y, advise an investor as to which security he should invest in.

P.T.O.

	Average return (in % age)	S.d. of return (in % age)
Security X	15	3
Security Y	9	2

(c) Give examples of five leading economic indicators, three lagging indicators and two coincidental indicators following the barometric approach in fundamental analysis.

2. Answer any *one* question : 10×1=10

(a) (i) Why is business risk considered both a systematic risk and also an unsystematic risk? Explain.

(ii) Mr. I, an investor bought 500 equity shares of Z Co. Ltd. at Rs. 35 per share as on 31.03.2018. The company declared a dividend at 11% rate for the year ended in 2018. Each year after that the company increased its dividend rate by 0.5%. The company went for a right issue of equity shares among its existing shareholders, as on 30.09.2022 in the ratio of 1 : 4 at an exercise price of Rs. 15 per share when the cum-rights price of each equity share with a Rs. 10 face value was Rs. 25. If Mr. I sold all the shares as on 31.03.2025 at a price of Rs. 38 per share and if the time lag in dividend payment is 2 months from the due date, calculate Mr. I's total holding period rate of return. 5+5

(b) Following share price data are obtained for a company, X for any 7 days :

Day	Opening price (in Rs.)	Closing price (in Rs.)	High price (in Rs.)	Low price (in Rs.)
1	25	27	28	24
2	26	29	29	25
3	28	27	29	24
4	30	26	32	26
5	31	29	33	27
6	33	30	37	28
7	35	31	38	29

From the above information, prepare a line chart and a bar chart. Also prepare a candlestick chart for the first 3 days only. (3+4)+3

Com - 301.2

(Marks : 20)

3. Answer any ***two*** questions : 5×2=10

(a) Mrs. Preity holds a portfolio having securities W and N which are in the ratio of 3 : 2. Their respective returns are 14% and 22%, whereas their variances are 64 and 100. If the correlation coefficient between the securities is (–) 0.60, determine portfolio return and portfolio risk. Also, determine the ratio of investment in the two securities for minimising the portfolio risk. 1+2+2

P.T.O.

(b) There are two individuals A and B of whom A is more risk-averse. With the help of a diagram, explain whether the optimal portfolio for A and B will be the same.

(c) Explain the CAPM equation. Determine the expected return of security Z (beta = 1.40) if the expected return of U (beta = 1.25) and that of W (beta = 1.80) are 11.25% and 14% respectively.

2+3

4. Answer any *one* question : 10×1=10

(a) (i) Explain the concepts of active portfolio revision and passive portfolio revision.

(ii) You are required to show the process of portfolio revision under the constant rupee plan if the revision point is set at +/- 6% based on the following information :

The value of the aggressive and defensive portfolio is Rs. 500000 and Rs. 400000 respectively. The share price on different days is as follows :

Day	1	2	3	4	5	6	7
Price (Rs.)	625	650	700	650	600	582	500

4+6

(b) (i) Explain the Random Walk theory.

(ii) Mr. Yashraj Mukherjee bought 1000 units of WIN Mutual Fund on 1st January, 2023 which he sold after one year. From the given information, you are required to compute the return in Rupee term and percentage term :

Particulars	01.01.2023 Rs.	01.01.2024 Rs.
Equity share holding : Security X (5000 shares) : Market price per share	110	130
Equity share holding : Security X (5000 shares) : Book value per share	120	125
Equity share Holding Y (8000 shares) : Market price per share	450	400
Equity share holding Y (8000 shares) : Book value per share	345	380
Investment in bonds : Market value	12,00,000	16,50,000
Cash and cash equivalents	3,50,000	5,00,000
Short-term liabilities	3,20,000	4,10,000
Long-term liabilities	8,90,000	7,15,000
Accrued income	2,02,000	1,75,000
Accrued expenses	1,30,000	1,50,000
No. of outstanding units	1,25,000	

4+6

Internal Assessment : 10 marks