

**K24P 3170**

Reg. No. : .....

Name : .....

**III Semester M.Com. Degree (C.B.C.S.S. – OBE – Regular)**  
**Examination, October 2024**  
**(2023 Admission)**

**CMCOM 03C12 – SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT**

Time : 3 Hours

Max. Marks : 60

**SECTION – A**

Answer **any five** questions in this Section. **Each** question carries **3** marks.

1. Define Investment. How does it differ from Speculation ?
2. State the assumptions of the Random Walk Theory.
3. Distinguish between Fundamental Analysis and Technical Analysis.
4. Last year's dividend of a company is ₹ 40. The expected growth rate is 5%. Rate of return is 10%. Identify the value of equity share. Should the share be sold or bought in case the market price of the share is ₹ 555 ?
5. Mr. Joshi has a portfolio of securities: given below :

| Amount (in lakhs) | 6  | 9   | 12  | 15  | 18 |
|-------------------|----|-----|-----|-----|----|
| Return            | 7% | 12% | 19% | 10% | 2% |

Compute the expected return of the portfolio.

6. Consider two securities, L and M, with expected returns of 15% and 24% respectively; and the SD of 35% and 52% respectively. Determine the SD of a portfolio weighted equally between two securities if their correlation is – 0.9.

**(5×3=15)**

P.T.O.



## SECTION – B

Answer **any three** questions in this Section. **Each** question carries **5** marks.

7. "No Investments are risk-free." Do you agree ? Evaluate the types of risks in bond investments.
8. What factors necessitate Portfolio Revision ? Discuss the constraints in it.
9. What is Portfolio Management ? Outline the factors to be considered by an investor during Portfolio Selection.
10. A security pays a dividend of ₹ 3.85 and sells currently at ₹ 83. The security is expected to sell at ₹ 90 at the year-end. The security has a beta of 1.15. The risk-free rate is 5% and the expected return on the market index is 12%. Assess whether the security is correctly priced or not.
11. Sunrise Ltd. paid a dividend of ₹ 2 per share during the current year. It is expected to pay a dividend of ₹ 3 per share during the next year. Investors forecast a dividend of ₹ 3.50 and ₹ 4 per share respectively. After that it is expected that annual dividend grows at 10% per year into an indefinite period. If the investors required rate of return is 20%, then calculate the true value of share. Should the shares be bought or sold, if the market price is ₹ 50 ? (3×5=15)

## SECTION – C

Answer **any three** questions in this Section. **Each** question carries **10** marks.

12. "Elliot Wave Theory is used as a toolkit to predict price movements in Technical analysis." Evaluate the properties and applications of this theory with a diagram.
13. From the following details, calculate the Current Yield, YTM and YTC of the bond :

|                         |            |
|-------------------------|------------|
| Market Price            | ₹ 107      |
| Face value              | ₹ 100      |
| Coupon rate             | 12%        |
| Date of purchase        | 01/01/2018 |
| Maturity date           | 31/12/2023 |
| Callable on             | 01/01/2020 |
| Interest payable        | Annually   |
| Maturity/callable value | ₹ 105      |



14. Monthly return data (in percent) for Company A whose stock and the NSE Index for a 8 month period are given below :

| Month | Company A | NSE    |
|-------|-----------|--------|
| 1     | - 0.75    | - 0.45 |
| 2     | 5.40      | -0.52  |
| 3     | -3.55     | -1.08  |
| 4     | 3.41      | 1.64   |
| 5     | 9.25      | 6.67   |
| 6     | 2.36      | 1.21   |
| 7     | -0.45     | 0.72   |
| 8     | 5.51      | 0.84   |

- i) Calculate the Alpha and Beta for the Company A stock.  
ii) Suppose the NSE Index is expected to grow by 20% next month, then how much return would you expect from Company A ?
15. The rate of return and its probabilities of occurrence of two stocks A and B are given in the table below :

| Year | Return on Stock X | Return on Stock Y |
|------|-------------------|-------------------|
| 2021 | 14                | 12                |
| 2022 | 16                | 18                |
| 2023 | 18                | 15                |

- i) Compute the expected return of a portfolio made up of 75% of X and 25% of Y.  
ii) What are the standard deviations of X and Y stocks ?  
iii) Determine the Covariance and Correlation coefficient of stocks X and Y.  
iv) If the proportion is changed to 60% of X and the remaining of Y, then determine the portfolio risk.
16. Given the following information :

|           | PORTFOLIO |       |       |      |
|-----------|-----------|-------|-------|------|
|           | 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 |

$R_f = 6\%$  and  $R_m = 12\%$ .

Calculate the following and interpret the results by ranking :

- i) Sharpe Ratio      ii) Treynor Ratio      iii) Jensen Ratio.

(3×10=30)