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)**



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## 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 |

Rf = 6% and Rm = 12%.

Calculate the following and interpret the results by ranking :

i) Sharpe Ratio ii) Treynor Ratio iii) Jensen Ratio. **(3×10=30)**

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