



IV Semester M.Com. Degree Examination, August/September 2025
(2021-22) (CBCS Scheme)

COMMERCE

FB 4.4 : Security Analysis and Portfolio Management

Time : 3 Hours

Max. Marks : 70

SECTION – A

Answer any seven out of ten. Each question carries two marks

$$(7 \times 2 = 14)$$

1. a) What does a beta value of less than 1 indicate ?
b) List any four popular investment options available to individual investors in India.
c) What is meant by equity valuation ?
d) What is Dow Theory ? State one of its assumptions.
e) State the meaning of Arbitrage Pricing Theory (APT).
f) What is the difference between alpha and beta in portfolio analysis ?
g) What is portfolio revision ? Mention one reason it may be needed.
h) Define market timing in investment management.
i) How do trends in global markets affect Indian stock markets ?
j) Mention any two foreign debt instruments available for Indian companies.

SECTION – B

Answer any four questions out of six. Each question carries five marks. (4x5=20)

2. Explain the factors to be considered before making an investment decision.
 3. An investor is evaluating the equity shares of Omega Ltd., which are currently trading at Rs. 250 per share in the market. The company is expected to pay a dividend of Rs. 20 per share after one year, and the dividend is projected to grow at a constant rate of 6% annually. What rate of return should the investor expect on this investment ?



4. The following data shows the returns of the Sensex (R_m) and TCS Ltd . (R_i) over a certain period : Calculate the Beta (β) of TCS stock using the market (Sensex) returns and also compute Alpha.

| Period | Sensex Return (R _m) % | TCS Return (R _i) % |
|--------|-----------------------------------|--------------------------------|
| 1 | 5 | 6 |
| 2 | 7 | 9 |
| 3 | 4 | 5 |
| 4 | 6 | 7 |
| 5 | 3 | 4 |
| 6 | 8 | 10 |
| 7 | 2 | 3 |

5. Explain the key principles of the Harry Markowitz Modern Portfolio Theory and its role in risk-return optimization.
6. What are formula plans in portfolio revision ? Explain their types with examples.
7. Differentiate between ADRs, GDRs and IDRs with examples.

SECTION – C

Answer any two questions out of four. Each question carries twelve marks. (2x12=24)

8. Stocks X and Y have yielded the following returns under different market scenarios. The probabilities of these scenarios and the associated returns are given below :

| Probability | Return of Stock X (%) | Return of Stock Y (%) |
|-------------|-----------------------|-----------------------|
| 0.4 | 12 | 7 |
| 0.35 | 6 | 10 |
| 0.25 | 3 | 5 |

An investor constructs a portfolio consisting of 70% in Stock X and 30% in Stock Y. Answer the following questions :

- What is the expected return on a portfolio made up of 70% investment in Stock X and 30% in Stock Y ?
- Calculate the standard deviation of returns for each stock.
- Compute the covariance and coefficient of correlation between Stock X and Stock Y.
- Determine the portfolio risk (standard deviation) for the portfolio consisting of 70% in Stock X and 30% in Stock Y.



9. Write a note on :
- Modern Charting Tools used in Technical Analysis
 - Common Technical Indicators used in Stock Market Analysis
 - Price Patterns of Stock and their relevance in trading decisions.
10. Explain the following models of portfolio management and discuss their relevance in investment decision-making :
- Capital Asset Pricing Model (CAPM)
 - Sharpe Single Index Model
 - Two-Factor and Multi-Factor Models.
11. You are working as a financial analyst at a wealth management firm. Your manager has provided you with return and risk data of three mutual funds and asked you to assess their risk-adjusted performance.

| Fund | Mean Return (%) | Standard Deviation (%) | Beta |
|---------------------|--------------------|---------------------------|------|
| Axis Blue Chip Fund | 18 | 16 | 1.4 |
| HDFC Flexi Cap Fund | 14 | 12 | 1.1 |
| SBI Small Cap Fund | 11 | 11 | 0.7 |
| Market | 9 | 9 | 1.0 |
| Risk-free rate | 5% | | |

- Evaluate the performance of the above funds using :
 - Sharpe Ratio
 - Treynor Ratio
 - Jensen's Alpha
- Rank the funds based on each performance measure and briefly interpret your findings to recommend the best-performing fund.



SECTION – D

Answer the following question.

(1×12=12)

12. You are a financial analyst at Wealth Wise Advisors. A client, Mr. Arjun Mehta, is evaluating three listed companies for long-term equity investment. He wants to understand which company is fundamentally stronger and better positioned in its industry.

Here is the financial data :

| Company | Industry | Market Price (₹) | EPS (₹) | P/E | ROE (%) | D/E Ratio | Beta |
|--------------------------|-------------|------------------|---------|-----|---------|-----------|------|
| Infosys Ltd. | IT Services | 1,500 | 60 | 25 | 28 | 0.2 | 0.95 |
| Tata Motors | Automobile | 900 | 18 | 50 | 12 | 1.1 | 1.5 |
| HUL (Hindustan Unilever) | FMCG | 2,400 | 40 | 60 | 40 | 0.1 | 0.75 |

Questions :

- 1) **Company Analysis :** Using the data provided, evaluate the three companies on the basis of : Price-to-Earnings (P/E) Ratio, Return on Equity (ROE), Debt-to-Equity Ratio (D/E). What do these indicators suggest about the company's profitability, valuation and financial risk ?
- 2) **Industry Outlook :** Provide a brief outlook on the current trends and challenges in each of the following industries : IT Sector, Automobile Sector, FMCG Sector.
- 3) **Investment Insight :** Based on your fundamental and industry analysis, which company appears to be the most suitable for long-term investment and why ?