

POST-GRADUATE DEGREE PROGRAMME

Term End Examination — December, 2024

ECONOMICS

Paper-XII : FINANCIAL ECONOMICS

Time : 2 hours]

[Full Marks : 50

Weightage of Marks : 80%

Special credit will be given accuracy and relevance in the answer. Marks will be deducted for spelling, untidy work and illegible handwriting. The weightage for each question has been indicated in the margin.

Use of scientific calculator is strictly prohibited.

1. Answer any *four* of the following questions : $2\frac{1}{2} \times 4 = 10$
- a) How is the present value of a Perpetuity calculated ?
 - b) Write the formula for the future value of an annuity.
 - c) Suppose the initial cost of a project is Rs. 100. Its life is two years. The project will not yield any return at the end of the first year. But it yields Rs. 144 at the end of the second year. Calculate the IRR of the project.
 - d) Calculate the historical return of a single asset (i.e., Security and Bond) using an example.
 - e) What do you mean by Forward (or Futures) market ?
 - f) Present a flow chart on the classification of financial markets based on various criteria.
2. Answer any *four* of the following questions : $5 \times 4 = 20$
- a) Distinguish between simple interest and compound interest.
 - b) Explain the Payback method of investment project appraisal.
 - c) Define any five types of Bonds (or Debentures).
 - d) What are the components of systematic and unsystematic risks ?
 - e) Explain how to minimize risk exposure.

- f) Define the expected return on a portfolio. If expected return on Security I is 10% and that on Security II is 18% and proportion invested on Security I is 20% and that on Security II is 80%, then calculate the expected return on the portfolio.

3. Answer any *two* of the following questions : 10 × 2 = 20

- a) A company wants to select a project from 3 projects X, Y and Z. In each case the initial investment is Rs. 10,000. The life span of each machine is 4 years. The existing cost of capital is 15%. The expected net cash incomes of the projects are given in the following table. (All the projects have no scrap value)

Years	Cash inflow of Project X (Rs.)	Cash inflow of Project Y (Rs.)	Cash inflow of Project Z (Rs.)
1	2,000	6,000	2,000
2	3,000	4,000	6,000
3	4,000	3,000	4,000
4	6,000	2,000	3,000

At the discount rate of 15% present value factors in different years are 0.870 for the first year, 0.756 for the second year, 0.658 for the third year and 0.572 for the fourth year.

Which project do you recommend and why ?

- b) Explain with example how to calculate the rate of return on risky assets.
- c) Name the sub-markets in a money market. Discuss in detail these sub-markets.
- d) Write short notes on any two of the following : 5 × 2
- i) The process of compounding and the process of discounting
 - ii) Accept-Reject rule under Profitability Index Method (or Benefit-Cost Ratio Method)
 - iii) Concept of factoring and forfaiting
 - iv) Different types of swaps