

2022

**ECONOMICS — HONOURS**

**Paper : DSE-B-2**

**(Financial Economics)**

**Full Marks : 65**

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

**Group - A**

2×10

1. Answer *any ten* questions :

- (a) What is a fixed income security? Give an example.
- (b) What is the coupon rate of a bond?
- (c) Calculate the present value of ₹ 5,000 at an interest rate of 10% after 3 years, discounting is done half yearly.
- (d) What is meant by Yield to Maturity?
- (e) What is a price yield curve?
- (f) Differentiate between bid price and ask price of a bond.
- (g) State the One Fund Theorem.
- (h) What is a Long Hedge?
- (i) When is a Call Option exercised?
- (j) What is meant by LIBOR?
- (k) What is Put-Call Parity?
- (l) What is meant by Optimum Capital Structure of a firm?
- (m) What do you mean by Venture Capital?
- (n) What is the Overall Cost of capital of a firm?
- (o) Define Debt-Equity Ratio.

**Group - B**

2. Answer *any three* questions :

- (a) Suppose a new consumer product is to be launched. The cash flows over the three year life of the project will be ₹ 2000 in the first two years and ₹ 4000 in the third year. It will cost ₹ 10,000 to begin the project. Using a 10% discount rate, evaluate the project with the Net Present Value Criterion (NPV). 5

**Please Turn Over**

- (b) (i) Given the following spot rates of interest,  $S_1 = 9\%$  and  $S_2 = 10\%$ , calculate the Forward Rate  $f_{12}$ .  
 (ii) A bond with a face value of ₹ 100, with coupon rate of 8% and maturity period of two years and redeemable at par is sold at par value. Calculate its yield to maturity. 2+3
- (c) Distinguish between Capital Market Line and Security Market Line in CAPM. 5
- (d) Discuss the factors that affect pricing of an option. 5
- (e) Discuss the importance of Equity shares and Preference shares as sources of corporate finance. 5

### Group - C

Answer *any three* questions.

3. (i) There are two financial assets in a portfolio. Calculate the portfolio mean and variance given the following data :

Assets	Expected Return	Standard Deviation
A	15%	22%
B	10%	18%

[Covariance  $_{AB} = 1\%$ , Weights of Assets :  $W_A = 30\%$ ,  $W_B = 70\%$ ]

- (ii) Define the Minimum Variance Set and the Efficient Frontier with the help of a diagram. 5+5
4. (i) What is the expected rate of return and variance of the rate of return on a portfolio that consists of both risky assets and a risk-free assets?  
 (ii) Define the Capital Allocation Line. 5+5
5. Discuss the various option trading strategies in the market. 10
6. Explain the three standard theories for the Term Structure of interest rates. 10
7. Discuss the M-M Propositions on the Capital Structure of a firm. 10