2021

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

1. Answer ***any ten*** questions :

(a) What is the difference between primary market and secondary market? 2

(b) Distinguish between a bond and a debenture. 2

(c) What is the underlying objective of portfolio management? 2

(d) Find the effective rate of interest when an interest rate of 5% is applied to the original capital of ₹ 10,000 and compounded monthly. 2

(e) What is a zero-coupon bond? Give an example. 1+1

(f) A company has to redeem debentures of ₹ 10,00,000 at the end of 3 years from now. How much money should the company accumulate every year at 10% interest rate? 2

(g) What is meant by arbitrage? 2

(h) State the Two Fund Theorem. 2

(i) Distinguish between call option and put option. 2

(j) Can Forward prices and Future prices be the same? 2

(k) What is call money? 2

(l) Explain a currency swap. 2

(m) What is dividend pay-out ratio? 2

(n) Distinguish between redeemable and irredeemable debentures. 2

(o) What is meant by 'ploughing back of profit'? 2

Group - B

2. Answer ***any three*** questions.

(a) (i) Calculate the current yield of a 8% coupon bond (interest is paid annually) with FV of ₹ 1,000 and a maturity period of 3 years, that is trading in the market for ₹ 924.20. What are the limitations of such a measure of yield?

(ii) Show with an example the relationship between yield to maturity and the coupon rate of a bond when it is sold at a discount. (2+1)+2

(b) What does a downward sloping yield curve indicate? Explain any one of the standard theories for the Term structure of interest rates. 2+3

(c) Explain the Modigliani-Miller approach to the Capital Structure of a firm. 5

(d) Distinguish between Forward contracts and Future contracts. 5

(e) Discuss the importance of capital structure in financial management of a company. 5

Group - C

Answer ***any three*** questions.

3. (a) Explain why a zero-coupon bond has duration equal to its maturity date.

(b) Find the duration of a 5 year bond with a face value of ₹ 1,000, which is sold at par with 12% coupon per year paid semi-annually.

(c) Derive the formulae for estimating the volatility of bond price and thereby calculate the percentage change in bond price and the new bond price if the yield to maturity falls to 11%. 2+2+(2+4)

4. (a) Suppose that an investor has only two assets, Stock 1 and Stock 2 with

	Stock 1	Stock 2
Expected return	15%	10%
Standard Deviation	22%	18%

Covariance of Stock 1 and 2 = 1%

If the investor wants to minimise portfolio variance, following Markowitz model, what would be the weightage of Stock 1 and Stock 2 in his portfolio? Calculate the mean and variance of the Minimum Variance Portfolio.

(b) Draw a feasible set of portfolios and identify the Efficient Frontier and Minimum Variance Portfolio. (5+1+2)+2

5. Explain briefly the various methods of computing cost of equity capital. Which of them do you consider most appropriate and why? 8+2

6. Explain the process of deriving optimal portfolio on the basis of One Fund Theorem. 10

7. (a) State and explain the put-call parity theorem.

(b) Distinguish between bullish and bearish call option spreads. 5+5