

Roll No.

Total No. of Questions—5]

Time Allowed—3 Hours

[Total No. of Printed Pages—6

Maximum Marks—100

PET

Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi medium. If a candidate who has not opted for Hindi medium, answers in Hindi, his answers in Hindi will not be valued.

Answer all questions.

Working notes should form part of the answer.

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1. (a) From the following details relating to a project, analyse the sensitivity of the project to changes in initial project cost, annual cash inflow and cost of capital : 10

Initial Project Cost (Rs.)	1,20,000
Annual Cash Inflow (Rs.)	45,000
Project Life (Years)	4
Cost of Capital	10%

To which of the three factors, the project is most sensitive ? (Use annuity factors : for 10% ... 3.169 and 11% ... 3.109).

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- (b) ABC Company is considering acquisition of XYZ Ltd. which has 1.5 crores shares outstanding and issued. The market price per share is Rs. 400 at present. ABC's average cost of capital is 12%. Available information from XYZ indicates its expected cash accruals for the next 3 years as follows :

Year	Rs. Cr.
1	250
2	300
3	400

Calculate the range of valuation that ABC has to consider. (PV factors at 12% for years 1 to 3 respectively : 0.893, 0.797 and 0.712).

- (c) Describe the interface of Financial policy with Corporate strategic management. 6
2. (a) New Projects Ltd. is evaluating 3 projects, P-I, P-II, P-III. Following information is available in respect of these projects : 10

	P-I	P-II	P-III
Cost	Rs. 15,00,000 ✓	Rs. 11,00,000	Rs. 19,00,000
Inflows—Year 1	6,00,000	6,00,000	4,00,000
Year 2	6,00,000	4,00,000	6,00,000
Year 3	6,00,000	5,00,000	8,00,000
Year 4	6,00,000	2,00,000	12,00,000
Risk Index	1.80	1.00	0.60

Minimum required rate of return of the firm is 15% and applicable tax rate is 40%. The risk free interest rate is 10%.

Required :

- (i) Find out the risk-adjusted discount rate (RADR) for these projects.
- (ii) Which project is the best ?

$$RADR = R_f + \beta(R_m - R_f)$$

- (b) The following data relate to Anand Ltd.'s share price :

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Current price per share	Rs. 1,800
6 months future's price/share	/ Rs. 1,950

Assuming it is possible to borrow money in the market for transactions in securities at 12% per annum, you are required :

- (i) to calculate the theoretical minimum price of a 6-months forward purchase, and
 (ii) to explain arbitrating opportunity.
- (c) Saranam Ltd. has issued convertible debentures with coupon rate 12%. Each debenture has an option to convert to 20 equity shares at any time until the date of maturity. Debentures will be redeemed at Rs. 100 on maturity of 5 years. An investor generally requires a rate of return of 8% p.a. on a 5-year security. As an investor when will you exercise conversion for given market prices of the equity share of (i) Rs. 4, (ii) Rs. 5 and (iii) Rs. 6.

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Cumulative PV factor for 8% for 5 years : 3.993

PV factor for 8% for year 5 : 0.681

- Q. (a) Mr. Sinha has invested in three Mutual fund schemes as per details below :

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	Scheme X	Scheme Y	Scheme Z
Date of Investment	01.12.2008	01.01.2009	01.03.2009
Amount of Investment	Rs. 5,00,000	Rs. 1,00,000	Rs. 50,000
Net Asset value at entry date	Rs. 10.50	Rs. 10.00	Rs. 10.00
Dividend received upto 31.03.2009	Rs. 9,500	Rs. 1,500	Nil
Nav as at 31.3.2009	Rs. 10.40	Rs. 10.10	Rs. 9.80

You are required to calculate the effective yield on per annum basis in respect of each of the three schemes to Mr. Sinha upto 31.03.2009.

- (b) Classic Finance, a Leasing Company, has been approached by A prospective customer intending to acquire a machine whose cash down price is Rs. 6 crores. The customer, in order to leverage his tax position, has requested a quote for a three year lease with rentals payable at the end of each year but in a diminishing manner such that they are in the ratio of 3 : 2 : 1. Depreciation can be assumed to be on WDV basis at 25% and classic finance's marginal tax rate is 35%. The target rate of return for classic finance on the transaction is 10%. You are required to calculate the lease rents to be quoted for the lease for three years.

- (c) Explain briefly the capital Asset pricing model used in the context of valuation of securities.

4. (a) B Ltd. is a highly successful company and wishes to expand by acquiring other firms. Its expected high growth in earnings and dividends is reflected in its PE ratio of 17. The Board of Directors of B Ltd. has been advised that if it were to take over firms with a lower PE ratio than its own, using a share-for-share exchange, then it could increase its reported earnings per share. C Ltd. has been suggested as a possible target for a takeover, which has a PE ratio of 10 and 1,00,000 shares in issue with a share price of Rs. 16. B Ltd. has 5,00,000 shares in issue with a share price of Rs. 12.

Calculate the change in earnings per share of B Ltd. if it acquires the whole of C Ltd. by issuing shares at its market price of Rs. 12. Assume the price of B Ltd. shares remains constant.

- (b) An exporter is a UK based company. Invoice amount is \$3,50,000. Credit period is three months. Exchange rates in London are :

Spot Rate	(\$/£) 1.5865 - 1.5905
3-Month Forward Rate	(\$/£) 1.6100 - 1.6140.

Rate of Interest in Money Market :

	Deposit	Loan
\$	7%	9%
£	5%	8%

Compute and show how a money-market hedge can be put in place. Compare and contrast the outcome with a forward contract.

- 0 (c) Explain the importance of the budget and the revised budget to public sector undertakings. 5

- 5/ (a) XYZ established the following spread on the Delta Corporation's stock : 6

- (i) Purchased one 3-month call option for 100 Nos. with a premium of Rs. 30 and an exercise price of Rs. 550.
- (ii) Purchased one 3-month put option for 100 Nos. with a premium of Rs. 5 and an exercise price of Rs. 450.

The current price of Delta Corporation's stock is Rs. 500. Determine XYZ profit or loss if the price of Delta Corporation :

- (i) Stays at Rs. 500 after 3 months.
- (ii) Falls to Rs. 350 after 3 months.
- (iii) Rises to Rs. 600.

- (b) Subhash & Co. earns Rs. 8 per share having capitalisation rate of 10 per cent and has a return on investment at the rate of 20 per cent. According to Walter's model, what should be the price per share at 25 per cent dividend payout ratio ? Is this the optimum payout ratio as per Walter ? 6

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- (c) A stock costing Rs. 120 pays no dividends. The possible prices that the stock might sell for at the end of the year with the respective probabilities are : 8

Price	Probability
115	0.1
120	0.1
125	0.2
130	0.3
135	0.2
140	0.1

Required :

- Calculate the expected return.
- Calculate the Standard deviation of returns.