

**Paper-12: FINANCIAL MANAGEMENT & INTERNATIONAL FINANCE**

**Time Allowed: 3 Hours**

**Full Marks: 100**

*The figures in the margin on the right side indicate full marks.*

**Answer Question No. 1 from Part A which is compulsory and any five questions from Part B.**

**Working Notes should form part of the answer.**

**“Whenever necessary, suitable assumptions should be made and indicated in answer by the candidates.”**

**PART A (25 Marks)**

1. (a) In each, of the cases given below, one out of four answers is correct. Indicate the correct answer (= 1 mark) and give workings/reasons briefly in support of your answer (= 1 mark)

**[2x9=18]**

- (i) Consider the following:

One year euro interest rate is 3% (compounded quarterly).

One year Rupee interest rate is 6% (compounded quarterly).

The forward six months exchange rate is, ₹ 58.82/euro.

According to interest rate parity, the spot exchange rate is

- (A) ₹ 57.96  
(B) ₹ 58.10  
(C) ₹ 58.60  
(D) None of the above
- (ii) The dividend payout ratio of ANKITA LTD. is 40%. If the company follows traditional approach to dividend policy with a multiplier of 9, the P/E of ANKITA LTD. will be
- (A) 4.4  
(B) 6.6  
(C) 7.1  
(D) 7.7
- (iii) A company has expected Net Operating Income – ₹ 4,80,000; 10% Debt – ₹14,40,000 and Equity Capitalisation rate - 20% what is the weighted average cost of capital for the company?
- (A) 0.15385  
(B) 0.13585  
(C) 0.18351  
(D) 0.15531

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- (iv) The P/V ratio of a firm dealing in precision instruments is 50% and margin of safety is 40%. Calculate net profit, if the sales volume is ₹ 12,50,000.
- (A) ₹ 25,000  
(B) ₹ 1,25,000  
(C) ₹ 2,50,000  
(D) ₹ 1,50,000
- (v) TEENZA LTD. currently pays a dividend of ₹ 5 per share that is expected to grow at a rate of 10% for the next year, after which it is expected to grow at a rate of 7% forever. What value would you place on the stock of this company if a 15% rate of return is required? (Rounded off your answer to the nearest integer.)  
[Given PVIF (15% 1year) = 0.8696]
- (A) ₹ 63.05  
(B) ₹ 68.75  
(C) ₹ 67.10  
(D) ₹ 66.98
- (vi) The Degree of Operating Leverage (DOL) and the Degree of Financial Leverage (DFL) of ARASKA LTD. are 3 and 1.67 respectively. If the management of the company targets to increase the EPS by 10%, by how much percentage should sales volume be increased? (Rounded off your answer to the nearest integer.)
- (A) 5.00 %  
(B) 3.00 %  
(C) 2.00 %  
(D) 4.00 %
- (vii) SUPER LTD., an export customer who relied on the inter bank rate of ₹/\$ 47.50/10 requested his banker to purchase a bill for USD 80,000. What is the rate to be quoted to SUPER LTD., if the banker wants a margin of 0.09%?
- (A) ₹ 47.40  
(B) ₹ 47.46  
(C) ₹ 47.60  
(D) ₹ 47.80
- (viii) The total asset-turnover ratio and total asset to net-worth of LEENZA LTD. are 2 and 1.75 respectively. If the net-profit margin of the company is 8%, What will be its Return on Equity (ROE)?
- (A) 28.0%  
(B) 25.5%  
(C) 20.0%  
(D) 26.4%

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- (ix) The current price of a share of VOLTAS LTD. is ₹ 130. The company is planning to go for rights issue. The subscription price for one rights share is proposed to be ₹ 114. If the company targets that ex-rights value of a share shall not fall below ₹ 126, the number of existing shares required for one rights share will be
- (A) 1
  - (B) 2
  - (C) 3
  - (D) None of the above

(b) State if each of the following sentences is T (= true) or F (= false):

[1x7=7]

- (i) If a forward currency is FLAT, it means that the expected spot rate is equal to the forward rate.
- (ii) TRIMs are the rules, a country applies to the domestic regulations to promote Foreign investment, often as a part of an Industrial Policy.
- (iii) A project is a "One-shot" major undertaking.
- (iv) CVP analysis assumes a linear revenue function and a linear cost function.
- (v) The key issue of the theory of capital structure is to examine whether a business can change its value and cost of capital by changing its capital structure.
- (vi) In case of projects which are divisible, capital rationing is done by ranking the projects on the basis of Net Present Value (NPV).
- (vii) Leading and netting are internal hedging techniques whereas swap is an external technique for hedging.

### PART B (75 Marks for any five questions)

- 2 (a) SILVER INSTRUMENTS LTD. is in the business of manufacturing bearings. Some more product lines are being planned to be added to the existing system. The company has decided to acquire a machine costing ₹10,00,000 having a useful life of 5 years with the salvage value of ₹2,00,000 (consider short-term capital loss/gain for the income tax). The full purchase value of machine can be financed by bank loan at the rate of 10% interest p.a. repayable in five equal installments falling due at the end of each year. Alternatively, the machine can be procured on a 5 years lease, year end lease rentals being ₹2,50,000 per annum. The company follows the written down value method of depreciation at the rate of 25 per cent. The company is in the 30 per cent tax bracket.

Requirements:

- (i) What is the present value (PV) of cash outflow for each of these financing alternatives using the after-tax cost of Debt?
- (ii) Which of the two alternatives is preferable?

Note: Extracted from the TABLE of PV:

- (i) PVIF at 7% for 0 to 5 years 1.000, 0.9346, 0.8734, 0.8163, 0.7629, 0.7130.
- (ii) PVIF at 10% for 0 to 5 years are: 1.0000, 0.9091, 0.8264, 0.7513, 0.6830, 0.6209.
- (iii) PVIFA for 5 years at 10%= 3.7908.
- (iv) PVIFA for 5 years at 7% = 4.1002.

[(10+2)]

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- (b) Profit Margin and Turnover Ratio vary from one industry to another. What differences would you expect to find between a grocery chain such as Citi Mart and a steel company such as Tata Steel? **[3]**
- 3 (a) Progressive Limited last paid a dividend of ₹ 2 per share. Its earnings and dividends are expected to grow @ 8% p. a. The beta of the company is 1.3. If risk free-return is 6% p. a. and the return on market portfolio is 10% p. a., what is the price per share of the equity stock?
- (b) The following figures are available for Bangaloree & Co.:
- Net sales ₹ 15 crores
  - EBIT as percentage of Net Sales — 12%
  - Capital employed
  - (1) Equity ₹ 5 crores
  - (2) Preference Shares of ₹ 1 crore bearing 13% Rate of Dividend
  - (3) Debt @ 15% ₹ 3 crores.
- The applicable Income Tax to be taken as 40%.  
You are required to calculate
- (i) the Return on Equity of the company; and
  - (ii) the Operating Leverage of the company. Given that it's Combined Leverage is 3.
- (c) Distinguish between Capital Market and Money Market. **[4+(4+3)+4]**
- 4 (a) What do you understand by the term "Covenants" in the context of term loan agreements? Give some typical examples.
- (b) Sher Khan Ltd. is an all equity company with an equilibrium market value of ₹ 32.5 million and a cost of capital of 18% per year. The company proposes to repurchase ₹ 5 million of equity and to replace it with 13% irredeemable loan stock. Sher Khan's earnings before interest and tax are expected to be constant for the foreseeable future. The company's tax rate is 30%. All profits are paid out as dividends. Required:  
Using the assumptions of Modigliani and Miller explain and demonstrate how this change in capital structure will effect
- (i) The market value
  - (ii) The cost of equity
  - (iii) The cost of capital of Sher Khan Ltd.
- (c) What are the needs for a range of various performance measures in an organization? What are the various categories of performance indicator? **[5+6+4]**

5 (a) Explain the term "Swaps". Outline the possible benefits to Company of undertaking an Interest rate Swap.

(b) A proposed foreign investment involves a plant whose entire output of 1 million units per annum is to be exported. With a selling price of \$ 10 per unit, the yearly-revenue from this investment equals \$ 10 million. At present rate of exchange, dollar-costs of local production equal to \$ 6 per unit. A 10% devaluation is expected to lower unit costs by \$ 0.30, while a 15% devaluation will reduce these costs by an additional \$ 0.15. Suppose a devaluation of either 10% or 15% is likely, with respective probabilities of 0.4 and 0.2 (the probability of no currency change is 0.4). Depreciation at the current exchange rate equals \$ 1 million annually, while the local tax rate is 40%.

(i) What will annual dollar cash flows (after-tax) be under each exchange rate scenario?

(ii) What is the expected value of annual after-tax dollar cash flows assuming no repatriation of profits to the United States?

(iii) Considering that the project involves a total investment of \$ 25 million on plant and working capital, would you recommend the investment? Answer this question assuming that expected annual dollar cash flows, as worked out in (ii) above, would continue in perpetuity and dollar cash flows grow at an inflation rate of even 2 percent. Also assumed that the minimum required return on investment is 12 percent.

(c) ZEESAN LTD. is considering a project with the following expected cash flows:

Initial investment: ₹ 1,00,000.

Year	1	2	3
Expected Cash Inflows (₹)	70,000	60,000	45,000

Due to uncertainty of future cash flows, the management decides to reduce the cash inflows to certainty equivalent (CE) by taking only 80% for 1st year, 70% for 2nd year and 60% for 3rd year respectively. The cost of capital is 10%.

Required:

Is it worthwhile to take up the project?

**[5+(2+2+2)+4]**

6. (a) Explain the salient feature of non-recourse project financing.

**[6]**

(b) YOUNG LTD. sells its products to wholesale distributors. The management is worried over the liquidity and is exploring methods of improving the cash flow, by speeding up collection from debtors. The following table summarises its turnover and profits for the last two years and comparable debtors level as at the end of last two years.

The alternatives before the management are:

(i) Offer a 2% discount to customers who settle within 10 days of invoicing. It is estimated that 50% of customers would take advantage of this offer.

(ii) Seek the services of a factor, who will operate on a "service only" basis, administering and collecting payments from customers. Savings are expected to be ₹ 5,00,000 annually; also debtor days will come down to 45 days. Charges payable to the factor would be 1.5% of turnover. Young Ltd. can borrow from bank at 15% per annum.

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Amount in ₹'000

	Year 0	Year 1
Turnover	60,000	80,000
Profits	11,500	15,000
Debtors	8,000	13,000

Required:

Analyse the costs and benefits of both alternatives and state the preferred course of action.

[Note: Take 365 days in a year]

**[4+4+1]**

7 (a) Explain forfaiting as means of financing export receivable.

(b) The following table presents the proposed cash flows for projects A and B with their associated probabilities. Which project has a higher preference for acceptance?

Possibilities	PROJECT A		PROJECT B	
	Cash flow	Probabilities	Cash flow (₹lacs)	Probability
1	7,000	0.10	12,000	0.10
2	8,000	0.20	8,000	0.10
3	9,000	0.30	6,000	0.10
4	10,000	0.20	4,000	0.20
5	11,000	0.20	2,000	0.50

(c) The Shares of Kolkata Corporation Limited are selling at ₹ 105 each. Chandrashekhar wants to chip in with buying a three months call option at a premium of ₹ 10 per option. The exercise price is ₹ 110. Five possible prices per share on the expiration date ranging from ₹ 100 to ₹ 140, with intervals of ₹ 10 are taken into consideration by him. What is Chandrashekhar's pay-off as call option holder on expiration?

**[5+6+4]**

8. Write short notes on (any three):

**[5×3]**

(a) Green shoe option

(b) Forward as hedge instrument

(c) Strategic roll up,

(d) Factoring and its advantages.

(e) Du Pont Chart.