

**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 a part of the answer*

*“Wherever necessary, suitable assumptions should be made and indicated in answers by the candidates”*

**PART A (25 Marks)**

**Question.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) [2 × 8]**

- (i) A company issues a new 15 per cent debentures of ₹ 1,000 face value to be redeemed after 10 years. The debenture is expected to be sold at 5 per cent discount. It will involve floatation costs of 2.5 per cent of face value. The company's tax rate is 35 per cent. The cost of debt using short-cut method would be —
- A. 10.9%;  
B. 10.21%;  
C. 10.44%;  
D. 10.76%.
- (ii) If the value of a Malaysian Ringgit (\$/MR) was 0.2632, and the value of an Indian rupee (\$/₹) was 0.02212. The value of a Malaysian Ringgit in terms of Indian rupee will be —
- A. 10.21  
B. 5.90  
C. 11.90  
D. None of the above.
- (iii) Cactus Limited paid a dividend of ₹ 5 per share for 2013-14. The company follows a fixed dividend payout ratio of 60%. The company earns a return of 20% on its investment. The cost of capital to the company is 14%. What would be the expected market price of its share, using the Walter Model?
- A. ₹ 69.69;  
B. ₹ 50.50;  
C. ₹ 60.69;  
D. ₹ 70.10.
- (iv) A project has an equity beta of 1.2 and is going to be financed by 30% debt and 70% equity. Assume debt beta = 0,  $R_f = 10\%$  and  $R_m = 18\%$ . What is the required rate of return?
- A. 8.4%;  
B. 18%;  
C. 16.72%;  
D. 10%.
- (v) The interest rate in the United States is 5%, in Japan, the comparable rate is 1.5%. The spot rate for the yen is \$ 0.012067821. If the interest rate parity holds, what is the 90-day forward rate on the Japanese yen?
- A. \$ 0.01248;  
B. \$ 0.01359;

- C. \$ 0.01350;  
D. \$ 0.01195.
- (vi) The capital structure of a company is as under:  
3,00,000 Equity Shares of ₹ 10 each,  
32,000, 12% Preference Shares of ₹ 100 each,  
General Reserve ₹ 15,00,000,  
Securities Premium Account ₹ 5,00,000,  
25,000, 14% Fully Secured Debentures of ₹ 100 each,  
Term Loan of ₹ 13,00,000.  
Based on these, the leverage of the company is —  
A. 60.22%;  
B. 58.33%;  
C. 55.21%;  
D. 62.10%.
- (vii) The capital of PQR Limited is as follows :  
9% preference shares of ₹ 10 each ₹ 3,00,000  
Equity shares of ₹ 10 each ₹ 8,00,000  
Following further information is available:  
Profit after Tax ₹ 2,70,000  
Equity Dividend paid 20%  
The market price of equity shares ₹ 40 each  
Then the EPS and PE ratio are:  
A. ₹ 3.12 and 10.80;  
B. ₹ 3.33 and 10.34;  
C. ₹ 4.51 and 12.56;  
D. ₹ 3.04 and 13.16.
- (viii) Calculate the future value of ₹ 1,000 invested in State Bank Cash Certificate scheme for 2 years @ 5.5% p.a., compounded semi-annually.  
A. ₹ 1,114.62;  
B. ₹ 1,104.62;  
C. ₹ 1,401.51;  
D. ₹ 1,141.51.
- (b) State if each of the following sentences is true or false:** **[1 × 9]**
- (i) Low financial leverage indicates high financial risk and vice –versa.  
(ii) An investor expecting a fall in interest rates buys a floor and also a cap.  
(iii) Treasury management includes risk management.  
(iv) Profitability Index is the profit expected in capital budgeting.  
(v) In the CAPM model, 'systematic risk' is the risk that cannot be eliminated by diversification, it being common to all firms.  
(vi) There is no relevance of firm's production policy in determining the working capital requirement of a firm.  
(vii) Stochastic model is one of the various ways in determining the optimum level of cash balances of a company.  
(viii) Cost plus pricing is normally followed in those public enterprises which have no domestic competition and whose production costs are higher than the price of similar imported products.  
(ix) Risk Adjusted Discount Rate is a conventional technique to analyse risk.

**PART B (75 MARKS)**

**Question 2.**

(a) An oil company imports crude oil at the rate of 100 tonnes per month. The price of crude oil in the month of January is ₹ 5,000 per barrel (1 tonne = 7.33 barrel). It is forecasted that in the month of March the price per barrel of crude oil is likely to touch ₹ 6,000. The company wants to hedge against the rising price for its requirement in March. The futures contract price for March is now traded at ₹ 5,700 per barrel for 100 barrels.

Required:

(i) Explain how the oil company can hedge its exposure against the rising price of crude oil, and state the number of contracts it should book for it.

(ii) What will be the effective price per barrel if in the month of March the price of crude oil is as under:

Spot price — ₹ 5,500 per barrel

Futures — ₹ 5,800 per barrel.

**[(3+2)+5]**

(b) What do you understand by 'Trading on Equity'? State the limitations of Trading on Equity? **[1+4]**

**Question 3.**

(a) You are given the middle rates as under :

₹ 80/£ 1 in London,

₹ 47 /US \$ in Delhi, and

US \$ 1.58/£ 1 in New York.

Compute the Arbitrage gain on ₹ 8,00,000.

**[5]**

(b) A firm's sales, variable costs and fixed cost amount to ₹ 75,00,000, ₹ 42,00,000 and ₹ 6,00,000 respectively. It has borrowed ₹ 45,00,000 at 9 per cent and its equity capital totals ₹ 55,00,000.

(i) What is the firm's ROI?

(ii) Does it have favourable financial leverage?

(iii) If the firm belongs to an industry whose asset turnover is 3, does it have a high or low asset leverage?

(iv) What are the operating, financial and combined leverages of the firm?

(v) If the sales drop to ₹ 50,00,000, what will the new EBIT be?

(vi) At what level will the EBT of the firm equal to zero?

**[1+1+1+3+1+1]**

(c) Write briefly on Foreign Direct Investment.

**[2]**

**Question 4.**

(a) AMRITAM Ltd. has a total sale of ₹ 3.2 crores and its average collection period is 90 days. The past experience indicates that bad debts losses are 1.5% on sales. The expenditure incurred by the firm in administering its receivable collection efforts is ₹ 5,00,000. A factor is prepared to buy the firm's receivables by charging 2% commission. The factor will pay advance on receivables to the firm at an Interest rate of 18% per annum after withholding 10% as reserve. Assume 360 days in a year. Calculate the effective cost of factoring to the firm. **[7]**

(b) VEDAVYAS Ltd. is considering two mutually exclusive projects M and project N. The Finance Director thinks that the project with higher NPV should be chosen, whereas the Managing Director thinks that the one with the higher IRR should be undertaken, especially as both projects have the same initial outlay and length of life. The company

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anticipates a cost of capital of 10% and the net after-tax cash flow of the projects are as follows:

Year	0	1	2	3	4	5
Cash flows (₹)						
Project M	(4,00,000)	70,000	1,60,000	1,80,000	1,50,000	40,000
Project N	(4,00,000)	4,36,000	20,000	20,000	8,000	6,000

You are required to:

- (i) Calculate the NPV and IRR of each project.
- (ii) State with reasons, which project you would recommended. **[(3+3)+2]**

### Question 5.

- (a) A company is faced with the problem of choosing between two mutually exclusive projects. Project A requires a cash outlay of ₹ 1,00,000 and cash running expenses of ₹ 35,000 per year. On the other hand, Project B will cost ₹ 1,50,000 and require cash running expenses of ₹ 20,000 per year. Both the machines have an eight-year life. Project A has a salvage value of ₹ 4,000 and Project B has a salvage value of ₹ 14,000. The company's tax rate is 50% and it has a 10% required rate of return.

Assuming depreciation on straight line basis and that there is no funds constraint for the company, ascertain which project should be accepted. Present value of an annuity of ₹ 1 for 8 years = 5.335 and present value of ₹ 1 at the end of 8 years = 0.467, both at the discount rate of 10%.

Please solve the problem by an incremental cash flow approach. **[10]**

- (b) Write down the steps in Project Management. **[5]**

### Question 6.

- (a) An extract from exchange rate list of a Kolkata based bank is given below:

₹/¥ = 0.3992 : 0.4002

- (i) How many Yen will it cost for a Japanese tourist visiting India to purchase ₹ 2,500 worth of jackfruit?
- (ii) How much will Mr. Basu in Kolkata have to spend in rupees, to purchase a Sony Camcorder worth Yen 1,25,000? **[2+2]**

- (b) An Indian importer has to settle a bill for US \$ 1,50,000. There are two options available:  
Option A - Pay immediately by drawing from the bank overdraft account bearing interest @ 15% p.a.

Option B - Pay after 3 months with interest @ 5% p.a. in foreign currency.

The exchange rates are as under:

Spot (₹/US \$) = ₹ 50.50/ ₹ 51.00

3 months forward (₹/US \$) = ₹ 51.50/ ₹ 52.00

Evaluate the two options and advise. **[4+1]**

- (c) Z Co. has a capital structure of 30% debt and 70% equity. The company is considering various investment proposals costing less than ₹ 30 Lakhs. The company does not want to disturb its present capital structure. The cost of raising the debt and equity are as follows:

Project Cost	Cost of Debt	Cost of Equity
Upto ₹ 5 Lakhs	9%	13%
Above ₹ 5 Lakhs and upto ₹ 20 Lakhs	10%	14%

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Above ₹ 20 Lakhs and upto ₹ 40 Lakhs	11%	15%
Above ₹ 40 Lakhs and upto ₹ 1 Crore	12%	15.55%

Assuming the tax rate is 50%, compute the cost of two projects A and B, whose fund requirements are ₹ 8 Lakhs and ₹ 22 Lakhs respectively. If the projects are expected to yield after tax return of 11%, determine under what conditions it would be acceptable.

[6]

### Question 7.

(a) From the following information of A Ltd., calculate (i) Gross Operating Cycle, (ii) Net Operating Cycle, and (iii) No. of operating cycles in a year.

Particulars	₹
Raw material inventory consumed during the year	60,00,000
Average stock of raw material	10,00,000
Factory cost of goods produced	1,05,00,000
Average stock of work-in-progress	4,37,500
Cost of goods produced	1,14,00,000
Average stock of finished goods	9,50,000
Average trade debtors	11,25,000
Cost of credit sales	90,00,000
Average trade creditors	5,00,000
Expenses for the year	30,00,000
Average creditors for expenses	5,00,000
No. of working days in a year (Assume 360 days)	

[9]

(b) The paid-up capital of a company is ₹ 100 lakh. It has been declaring 20% dividend for the last 5 years. It has under consideration an expansion programme involving an investment of ₹ 100 lakh and its board of directors desires to raise the dividend to 25%. The expansion programme can be financed by four alternatives – A) 100% equity; B) 18% institutional loan (debt) and equity 50:50; C) Equity and debt, 70:30; and D) 100% debt. Income tax and dividend tax rate are 35% and 10% respectively.

Assuming rate of return as X, analyse the various financing alternatives from the point of view of taxes.

[6]

### Question 8.

Write Short Notes on any three of the following.

[5×3]

- (a) Asset Securitisation
- (b) Project Life Cycle
- (c) Zero working capital
- (d) Foreign Collaboration.