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) [2x9=18]

i) Increase in the degree of operating leverage and decrease in the degree of financial leverage is 20%. What would be the impact on degree of total leverage?
A. 4% increase
B. 5% increase
C. 4% decrease
D. No change

ii) The rates available in Indian market are:
₹/$ Spot 66.68/72
£/$ 0.602/06
If an Indian wants to acquire £, what rate should be charged to him?
A. ₹89.17/£
B. ₹110.83/£
C. ₹112.17/£
D. ₹90.22/£

iii) Xee Ltd. paid a dividend of ₹4.00 per share for the year 2013. If the expected growth rate is 12% and the rate of return is 20%, the intrinsic value for its share would be ______________.
A. ₹50
B. ₹200
C. ₹100
D. ₹55

iv) The spot and 6 month forward rates of $ in relation to rupee are ₹60.34/ 72 and 61.02/66 respectively. What would be the annualized forward margin (premium with respect to bid price)?
A. 15.32%
B. 12.32%
C. 13.52%
D. 15.23%

v) Firm A and B are similar in all respect. But firm A uses ₹5,00,000 debt in its capital. If the rate of corporate tax is 40%., how would the valuation of both the companies differ?
A. Value of firm A greater than value of firm B by ₹ 2,00,000
B. Value of firm B greater than value of firm A by ₹ 2,00,000
C. Value of firm A greater than value of firm B by ₹ 5,00,000

D. Value of firm B greater than value of firm A by ₹ 5,00,000

vi) The current price of a share of Asha Ltd. is ₹120. The company is planning to go for a rights issue. The subscription price for one rights share is proposed to be ₹104. If the company targets that ex-rights value of a share shall not fall below ₹116, the number of existing shares required for 1 right share would be
A. 1
B. 2
C. 3
D. 4

vii) The total asset – turnover ratio and total asset to net- worth ratio of a company are 2.10 and 2.50 respectively. If the net profit margin of the company is 6%, what would be the return on equity?
A. 30.50%
B. 31.50%
C. 30.00%
D. 32.50%

viii) AB Ltd. paid 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 8% forever. What would be the value of the stock if a 15% rate of return is required? [Given PVIF(15%,1 year) = 0.8696]
A. ₹63.81
B. ₹59.03
C. ₹67.88
D. ₹49.25

ix) X Ltd has an ROA of 10% and a profit margin of 2%. The Company's total asset turnover is
A. 5%
B. 20%
C. 12%
D. 8%

b) State whether true of false: [1 × 7 = 7]
i) Real options are most valuable when the underlying source of risk is very low.
ii) A firm's capital structure can never affect its free cash flows
iii) Issue of Bonus shares by the subsidiary company out of pre-acquisition profits affects the cost of control.
iv) CVP analysis assumes a linear revenue function and a linear cost function
v) Leading and netting are internal hedging techniques whereas swap is an external technique for hedging
vi) In case of projects which are divisible, capital rationing is done by ranking projects on the basis of Net Present Value (NPV)
vii) If a forward currency is FLAT, it means that the expected spot rate is equal to the forward rate.

PART B (75 MARKS)

Question.2

a) Arjun Ltd. Is considering the acquisition of a large equipment for Rs. 12,00,000. The equipment is expected to have an economic useful life of 8 years. The equipment can be financed either with a 8-year term loan at 14%, repayable in equal installments of ₹ 2,58,676 per year, or by an equivalent amount of lease rent every year. In both case payment is due at the end of the year. The equipment is subject to straight line method of depreciation for tax purposes. Assuming no salvage value after the 8-year useful life and 50% tax rate, which of the financing alternatives should be selected? [10]

b) Ashi Ltd furnishes the following information for the year, 2013 from which you are requested to determine the indifference point.
1. Funds required, ₹50,000
2. Existing number of Equity shares outstanding, 5000 @ ₹10 per share
3. Existing 10% debt, ₹20,000
4. Funds required can be raised either by
   (a) issue of 2,000 equity shares, netting ₹25 per share or
   (b) new 15% debt
5. The P/E Ratio will be 7 times in equity alternative and 6 times in debt alternative
6. Corporate tax is levied @ 40% [5]

Question.3

a) The financial position of Anju Ltd. On Jan. 1 and Dec. 31, 2013 is as follows:

Liabilities	1st Jan(₹)	31st Dec(₹)	Assets	1st Jan(₹)	31st Dec(₹)
Current Liabilities for goods	36,000	40,600	Cash	4,000	3,600
			Debtors	35,000	38,000
Loan from ABC Co		20,000	Stock	25,000	22,000
Loan from Bank	30,000	25,000	Land	20,000	30,000
Hire-purchase Vendor		20,000	Building	50,000	55,000
			Machinery	80,000	86,000
Capital	1,48,000	1,54,000	Delivery Van		25,000
	2,14,000	2,59,600		2,14,000	2,59,600

The delivery van was purchased in December, 2013 on hire-purchase basis; a payment of ₹5,000 was made immediately and the balance of amount is to be paid in 10 monthly installments of ₹2000 each together with an interest @ 15% p.a. During the year the partners withdrew ₹20,000for personal expenditure. The provision for depreciation against machinery on 31-12-2012 was ₹27,000 and 31-12-2013 was ₹36,000. You are requested to prepare the Cash Flow Statement. [10]

b) The sales turnover and profit during 2012 and 2013 are as follows.

	Sales (₹)	Profit (₹)
Year 2012	20,00,000	2,00,000
Year 2013	30,00,000	4,00,000

Calculate:
i) Profit Volume Ratio
ii) Sales required to earn a profit of ₹5,00,000
iii) Profit when sales is ₹10,00,000 [1+2+2]

Question.4

a) The spot rate on 1st April, 2013 is 1.785/£. Pound futures contract is sold at $1.790 for June Delivery and at $1.785 for September delivery. Expecting that pound will depreciate fast after June, a speculator buys the former and sells the latter. Later he finds that pound may appreciate by June and may not depreciate subsequently. So he reserves the two contracts respectively at $1.78 and $1.76. Suppose the exchange rate on both the maturity dates is $1.795/£. Calculate the gain/loss for the speculator. [6]

b) Evaluate the following:
   i) A pound option call contract has a strike rate of \$1.820/£ and a premium of \$0.08. Spot rate on maturity is \$1.920/£.How much would an option buyer gain/lose?
   ii) An American exporter exporting goods to UK fears depreciation of pound. Pound options are available at a strike price of \$1.884/£with a premium of \$0.03/£. The spot rate on maturity falls to \$1.824/£. How would he compensate for his loss?
   iii) Pound is expected to depreciate to \$1.730. Pound options are available at a strike price of \$1.830/£ with a premium of \$0.03/£. How would speculators react to the depreciation of pound? [3+3+3]

Question.5

a) ABC Co ltd. has 20,000 equity shares of ₹50 each outstanding. The following is the income statement relating to the previous year as well as four situations which may arise corresponding to the new project. The new project is expected to cost ₹5,00,000.

Particulars	Actuals (Previous Yr) ₹	Sell 10,000 equity shares (₹)		Sell 10% Debentures (₹)	
		Situation A	Situation B	Situation A	Situation B
Sales	8,00,000	12,00,000	9,00,000	12,00,000	9,00,000
Variable Expenses	2,40,000				
	5,60,000				
Fixed Cost	3,00,000				
EBIT	2,60,000				
Interest	Nil				
Earnings after interest	2,60,000				
Taxes	91,000				
EAT	1,69,000				
EPS	8.45				

Assuming variable cost as per cent of sales remains constant and additional fixed cost with new project is likely to be ₹1,00,000, complete the tabulation. Which plan would you recommend to finance the new project? [8]

b) Ashu Ltd wants to undertake a capital restructuring. It has provided the following estimates of the cost of debt and equity capital (after Tax) at various levels of debt-equity mix.

Debt as a % of Total Capital employed	Cost of debt (%)	Cost of Equity (%)
0	5.0	12.0
10	5.0	12.0
20	5.0	12.5
30	5.5	13.0
40	6.0	14.0
50	6.5	16.0
60	7.0	20.0

You are expected to determine the optimal debt-equity mix for the company by calculating the composite cost of capital. [7]

Question.6

a) Aditya Industries Ltd, wants to assess its working capital requirement for the year 2014. For this purpose the company has gathered the following data.

ESTIMATED COST PER UNIT OF FININSHED PRODUCT

	₹
Raw Materials	90

Direct Labour	50
Manufacturing & administrative overhead (excluding depreciation)	40
Depreciation	20
Selling Cost	30
Total Cost	230

The product is subject to excise duty of 10% (levied on cost of production) and is sold at ₹300 per unit.

Additional Information:

i. Budgeted level of activity is 1,80,000 units of output for 2014
ii. Raw materials costs consists of the following:
Pig iron ₹65 per unit, Ferro alloys ₹15 per unit, and cast iron borings ₹10 per unit.
iii. Raw materials are purchased from different suppliers having different credit periods:
Pig iron – 2 months, Ferro alloys – ½ month, and cast iron borings – 1 month
iv. Product is in process for a period of ½ month. Production process requires full unit (100%) of pig iron and ferro alloys in the beginning of production; cast iron boring is required only to the extent of 50% in the beginning and the remaining is needed at a uniform rate during the process. Direct labour and other overheads accrue similarly at a uniform rate throughout production process.
v. Past trends indicate that the pig iron is required to be stored for 2 months and other material for 1 month.
vi. Finished Goods are in stock for a period of 1 month.
vii. It is estimated that ¼ of the total sales are on cash basis and the remaining sales are on credit. Credit sales are collected over a period of 2 months.
viii. Average time-lag in payment of all overheads is 1 month and labour is ½ month.
ix. Desired cash balance to be maintained is ₹20,00,000.

You are required to ascertain the net working capital requirement of the company. [12]

b) Write a note on GATT. [3]

Question.7

a) Small Co. Ltd., who holds shares of Big Company Ltd. and is concerned about the fall in its dividends. The profit & loss account and the Balance Sheet of Big Co. for the current 2 years are provided below.

ABRIDGED PROFIT & LOSS ACCOUNT

(₹ IN LACS)

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
Income from sales & other sources	19,200	15,500
Expenditure:		
Operating & other expenses	15,600	11,900
Depreciation	700	650
Interest	1,850	1,750
	18,150	14,300
Profit for the year	1,050	1,200
Taxes	500	200
Profit after Taxes	550	1,000
Proposed Dividend	200	400

ABRIDGED BALANCE SHEET AS ON MARCH 31ST

(₹ IN LACS)

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
Sources of funds:		
Share Capital (of ₹10 each)	4,200	2,600

Reserves & Surplus	7,550	1,200
Convertible portion of 12.5% debentures	-	500
Loan Funds: Secured Loans (16%) Unsecured Loans (15%)	 10,100 1,000	 8,700 3,300
Total	22,850	16,300
Application of Funds:		
Fixed assets: Cost Less: Depreciation	 14,800 2,700 12,100	 11,200 2,000 9,200
Advances on capital A/c and capital work–in-process	1,000	200
	13,100	9,400
Current Assets: Inventories Sundry Debtors Cash and Bank Balances Loans and Advances	 8,600 1,400 850 3,000	 7,100 550 680 1,600
	13,850	9,930
Less: Current Liabilities	4,100	3,030
	9,750	6,900
Total	22,850	16,300

You are required to:

i. Compute – Interest cover, return on net worth, earnigs per share, dividend cover

ii. Justify whether the shares are to be disposed off or retained [6+2]

b) The following information is available in respect of the rate of return on investment (r), the capitalization rate (k_e) and earnings per share (E) of Aman Ltd.

r = 12% and E = ₹30

Determine the values of the shares, assuming the following:

	D/P Ratio	Retention Ratio	K_e (%)
A	10	90	20
B	20	80	19
C	30	70	18
D	40	60	17
E	50	50	16
F	60	40	15
G	70	30	14

[7]

Question.8

Write a short note on any three of the following: [5+5+5]

i) Lease Financing
ii) Commercial Paper
iii) Interest Rate swaps
iv) Capital Rationing
v) Factors affecting value of an option relating to stock option value and capital budgeting.