Total No. of Questions – **7**

Total No. of Printed Pages – **8**

Time Allowed – **3** Hours

Maximum Marks – **100**

APJ

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 has not opted for Hindi medium, his answers in Hindi will not be valued.

Question No. **1** is compulsory.

Attempt any **five** questions from the remaining **six** questions.

Working notes should form part of the answer.

Marks

1. Answer the following : **4×5 =20**

(a) Compute the sales variances (total, price and volume) from the following figures :

Product	Budgeted quantity	Budgeted Price per Unit (₹)	Actual quantity	Actual Price per unit (₹)
P	4000	25	4800	30
Q	3000	50	2800	45
R	2000	75	2400	70
S	1000	100	800	105

(b) ABC Limited has received an offer of quantity discounts on its order of materials as under :

Price per tonne ₹	**Tonnes** Nos.
4,800	Less than 50
4,680	50 and less than 100
4,560	100 and less than 200
4,440	200 and less than 300
4,320	300 and above

The annual requirement for the material is 500 tonnes. The ordering cost per order is ₹ 6,250 and the stock holding cost is estimated at 25% of the material cost per annum.

Required :

(i) Compute the most economical purchase level.

(ii) Compute E.O.Q. if there are no quantity discounts and the price per tonne is ₹ 5,250.

(c) MNP Limited has made plans for the next year 2010-11. It is estimated that the company will employ total assets of ₹ 25,00,000; 30% of assets being financed by debt at an interest cost of 9% p.a. The direct costs for the year are estimated at ₹ 15,00,000 and all other operating expenses are estimated at ₹ 2,40,000. The sales revenue are estimated at ₹ 22,50,000. Tax rate is assumed to be 40%.

Required to calculate :

(i) Net profit margin

(ii) Return on Assets

(iii) Asset turnover

(iv) Return on equity

(d) PQR Ltd. has the following capital structure on October 31, 2010 :

	₹
Equity Share Capital	20,00,000
(2,00,000 Shares of ₹ 10 each)	
Reserves & Surplus	20,00,000
12% Preference Shares	10,00,000
9% Debentures	30,00,000
	80,00,000

The market price of equity share is ₹ 30. It is expected that the company will pay next year a dividend of ₹ 3 per share, which will grow at 7% forever. Assume 40% income tax rate.

You are required to compute weighted average cost of capital using market value weights.

Marks

2. (a) PQR Construction Ltd. commenced a contract on April 1, 2009. The total contract was for ₹ 27,12,500. It was decided to estimate the total profit and to take to the credit of P/L A/c the proportion of estimated profit on cash basis which work completed bear to the total contract. Actual expenditure in 2009-10 and estimated expenditure in 2010-11 are given below : 8

	2009-10 Actuals (₹)	2010-11 Estimated (₹)
Materials issued	4,56,000	8,14,000
Labour : Paid	3,05,000	3,80,000
: Outstanding at end	24,000	37,500
Plant purchased	2,25,000	–
Expenses : Paid	1,00,000	1,75,000
: Outstanding at the end	–	25,000
: Prepaid at the end	22,500	–
Plant returned to stores (at historical cost)	75,000	1,50,000 (on Dec. 31, 2010)
Material at site	30,000	75,000
Work-in-progress certified	12,75,000	Full
Work-in-progress uncertified	40,000	–
Cash received	10,00,000	Full

The plant is subject to annual depreciation @ 20% of WDV cost. The contract is likely to be completed on December 31, 2010.

Required :

(i) Prepare the Contract A/c for the year 2009-10.

(ii) Estimate the profit on the contract for the year 2009-10 on prudent basis which has to be credited to P/L A/c.

Marks

(b) RST Limited is considering relaxing its present credit policy and is in the process of evaluating two proposed policies. Currently, the firm has annual credit sales of ₹ 225 lakhs and accounts receivable turnover ratio of 5 times a year. The current level of loss due to bad debts is ₹ 7,50,000. The firm is required to give a return of 20% on the investment in new accounts receivables. The company's variable costs are 60% of the selling price. Given the following information, which is better option ? **8**

(Amount in ₹ Lakh)

	Present Policy	**Policy Option I**	**Policy Option II**
Annual credit sales (₹)	225	275	350
Accounts receivable turnover ratio	5	4	3
Bad debt losses (₹)	7.5	22.5	47.5

3. (a) Following information is available regarding Process A for the month of October 2010 : **8**

Production Record :

(i)	Opening work-in-progress (Material : 100% complete, 25% complete for labour & overheads)	40,000 Units
(ii)	Units Introduced	1,80,000 Units
(iii)	Units Completed	1,50,000 Units
(iv)	Units in-process on 31.10.2010 (Material : 100% complete, 50% complete for labour & overheads)	70,000 Units

Cost Record :

Opening Work-in-Progress :

Material	₹ 1,00,000
Labour	₹ 25,000
Overheads	₹ 45,000

Cost incurred during the month :

Material	₹ 6,60,000
Labour	₹ 5,55,000
Overheads	₹ 9,25,000

Assume that FIFO method is used for W.I.P. inventory valuation.

Required :

(i) Statement of Equivalent Production

(ii) Statement showing Cost for each element

(iii) Statement of apportionment of Cost

(iv) Process A Account.

Marks

(b) (i) Calculate the degree of operating leverage, degree of financial leverage and the degree of combined leverage for following firms and interpret the results : 4

	P	Q	R
Output (Units)	2,50,000	1,25,000	7,50,000
Fixed Cost (₹)	5,00,000	2,50,000	10,00,000
Unit Variable cost (₹)	5	2	7.50
Unit Selling price (₹)	7.50	7	10.0
Interest Expense (₹)	75,000	25,000	–

(ii) Discuss the liquidity vs. profitability issue in management of working capital. 4

4. (a) Balance Sheets of ABC Limited as on March 31, 2009 and March 31, 2010 are as under : 8

Liabilities	31.3.2009 ₹	31.3.2010 ₹	Assets	31.3.2009 ₹	31.3.2010 ₹
Share Capital	40,00,000	40,00,000	Land and Building	30,00,000	28,00,000
General Reserve	8,00,000	9,00,000	Plant and Machinery	36,00,000	35,00,000
Profit and Loss A/c	5,00,000	7,20,000	Investments (long-term)	8,00,000	7,44,000
10% debentures	20,00,000	16,00,000	Stock	9,60,000	17,00,000
Bank Loan (long term)	10,00,000	12,00,000	Debtors	12,00,000	15,96,000
Creditors	8,00,000	11,60,000	Prepaid Expenses	1,00,000	80,000
Outstanding Expenses	40,000	50,000	Cash and Bank	2,80,000	1,70,000
Proposed dividend	6,00,000	7,20,000			
Provision for taxation	2,00,000	2,40,000			
	99,40,000	1,05,90,000		99,40,000	1,05,90,000

Additional Information :

(i) New machinery for ₹ 6,00,000 was purchased but an old machinery costing ₹ 2,90,000 was sold for ₹ 1,00,000 and accumulated depreciation thereon was ₹ 1,50,000.

(ii) 10% debentures were redeemed at 20% premium.

(iii) Investments (long term) were sold for ₹ 90,000 and its profit was transferred to general reserve.

(iv) Income-tax paid during the year 2009-10 was ₹ 1,60,000.

(v) An interim dividend of ₹ 2,40,000 has been paid during the year 2009-10.

(vi) Assume the provision for taxation as current liability and proposed dividend as non-current liability.

(vii) Investments (long term) are non-trade investments.

Required :

i) Schedule of changes in working capital.

ii) Funds flow from operations for the year ended March 31, 2010.

(b) MNP Ltd sold 2,75,000 units of its product at ₹ 37.50 per unit. Variable costs are ₹ 17.50 per unit (manufacturing costs of ₹ 14 and selling cost of ₹ 3.50 per unit). Fixed costs are incurred uniformly throughout the year and amount to ₹ 35,00,000 (including depreciation of ₹ 15,00,000). There are no beginning or ending inventories. 8

Required :

(i) Estimate breakeven sales level quantity and cash breakeven sales level quantity.

(ii) Estimate the P/V ratio.

(iii) Estimate the number of units that must be sold to earn an income (EBIT) of ₹ 2,50,000.

(iv) Estimate the sales level to achieve an after-tax income (PAT) of ₹ 2,50,000. Assume 40% corporate Income Tax rate.

Marks

5. (a) A manufacturing company has disclosed a net loss of ₹ 8,75,000 as per their cost accounting records for the year ended March 31, 2010. However, their financial accounting records disclosed a net loss of ₹ 7,91,250 for the same period. A scrutiny of the data of both the sets of books of accounts revealed the following information : **8**

		₹
(i)	Factory overheads over-absorbed	47,500
(ii)	Administration overheads under-absorbed	32,750
(iii)	Depreciation charged in Financial Accounts	2,25,000
(iv)	Depreciation charged in Cost Accounts	2,42,250
(v)	Interest on investments not included in Cost Accounts	62,750
(vi)	Income Tax provided in Financial Accounts	7,250
(vii)	Transfer fees (credit in Financial Accounts)	12,500
(viii)	Preliminary expenses written off	27,500
(ix)	Under-valuation of opening stock in Cost Accounts	6,250
(x)	Under valuation of closing stock in Cost Accounts	17,500

Required :

Prepare a Memorandum Reconciliation A/c.

(b) Distinguish between the following : **2×4 =8**

(i) Profit maximisation vs Wealth maximisation objective of the firm.

(ii) Global Depository Receipts and American Depository Receipts.

Marks

6. (a) A company has to make a choice between two machines X and Y. The two machines are designed differently, but have identical capacity and do exactly the same job. Machine 'X' cost ₹ 5,50,000 and will last for three years. It costs ₹ 1,25,000 per year to run. Machine 'Y' is an economy model costing ₹ 4,00,000, but will last for two years and costs ₹ 1,50,000 per year to run. These are real cash flows. The costs are forecasted in Rupees of constant purchasing power. Opportunity cost of capital is 12%. Ignore Taxes. Which machine company should buy ? **8**

	t = 1	t = 2	t = 3
$PVIF_{0.12,t}$	0.8929	0.7972	0.7118

$PVIFA_{0.12,2} = 1.6901$

$PVIFA_{0.12,3} = 2.4019$

(b) Write short notes on the following : **2×4 =8**

(i) Essential factors for installing a Cost Accounting system.

(ii) Treatment of under-absorbed and over-absorbed overheads in Cost Accounting.

7. Answer any **four** of the following : **4×4 =16**

(a) What are the methods of re-apportionment of service department expenses over the production departments ? Discuss.

(b) How apportionment of joint costs upto the point of separation amongst the joint products using market value at the point of separation and net realizable value method is done ? Discuss.

(c) Discuss the estimation of working capital need based on operating cycle process.

(d) Discuss financial break-even and EBIT-EPS indifference analysis.

(e) Discuss the three different methods of calculating labour turnover.