Paper 10- Cost & Management Accounting and Financial Management

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Full Marks: 100 **Time allowed: 3 hours**

PART – A (Cost and Management Accounting)
Section I

1. Answer the following questions:

(a) Choose the correct answer from the given four alternatives. **[1x6=6]**

(i) The breakeven point is the point at which,
(a) There is no profit, no loss
(b) Contribution margin is equal to total cost
(c) Total fixed cost is equal to total revenue
(d) All of the above.

(ii) The P/V ratio of a product is 0.4 and the selling price is ₹ 40 per unit. The marginal cost of the product would be,
(a) ₹ 8
(b) ₹ 24
(c) ₹ 20
(d) ₹ 25

(iii) If standard hours are 400 @ ₹ 1 per hour and actual hours are 380 @ ₹1.25 per hour, the labour rate variance is:
(a) ₹ 20 (Favourable)
(b) ₹ 25 (Favourable)
(c) ₹ 100 (Adverse)
(d) ₹ 95 (Adverse)

(iv) The time taken for initial unit of a product is 100 hours. At 80% learning rate what is the total time for 4 units.
(a) 100 hours
(b) 80 hours
(c) 160 hours
(d) 256 hours

(v) Sales ₹4,00,000; Variable Cost ₹ 3,00,000; Fixed Cost ₹ 75,000; Investments ₹ 1,50,000 and desired 20% on investments. What is residual income?
(a) ₹ 25,000
(b) ₹ 30,000
(c) ₹ 20,000
(d) ₹ (5,000)

(vi) Sales in January month ₹ 3,00,000; Credit Sales are 80%; Credit period is 2 months. Amount collected in the month of March is
(A) ₹ 50,000
(B) ₹ 2,40,000
(C) ₹ 40,000
(D) None of the above

(b) Match the statement in Column I with the most appropriate statement in Column II : **[1×4 =4]**

	Column I		Column II
i.	Inter-firm comparison	A	Decision Making
ii.	Margin of Safety	B	Difference between Standard and Actual Cost.
iii.	Variance Analysis	C	Profit / PV Ratio
iv.	Differential Costing	D	Technique for evaluating performance.

(c) State whether the following statements are True or False **[1x4=4]**

(i) Uniform costing is a method of costing.
(ii) A variance may be either favourable or adverse.
(iii) Marginal cost equals to prime cost plus variable overheads.
(iv) Variable Cost is also known as Indirect Cost.

Section II

Answer any three Question from Q. No 2, 3, 4 and 5. Each Question carries 12 Marks

2. (a) The following data relate to a manufacturing company:
Plant capacity : 4,00,000 units per annum. Present utilisation : 40%
Actuals for the year 2016 were :

Selling price	₹50 per unit	Variable Manufacturing Costs	₹15 per unit
Material Cost	20 per unit	Fixed Costs	27 lakhs

In order to improve capacity utilisation the following proposals are considered:
Reduce selling price by 10%
Spend additionally ₹ 3 lakhs on sales promotion.
How many units should be sold to earn a profit of ₹ 5 lakhs per year. **[6]**

(b) A company produces and markets industrial containers and packing cases. Due to competition, the company proposes to reduce the selling price. If the present level of profit is to be maintained, indicate the number of units to be sold if the proposed reduction in selling price is:
(a) 5%; (b) 10%;

The following additional information is available:

	₹	₹
Present Sales Turnover (30,000 units)		3,00,000
Variable Cost (30,000 units)	1,80,000	
Fixed Cost	70,000	2,50,000
Net Profit		50,000

[6]

3. (a) The budgeted sales for one month and the actual results achieved are as under:

Product	Budget			Actual		
	Quantity Nos.	Rate ₹	Amount ₹	Quantity Nos.	Rate ₹	Amount ₹
A	1,000	100	1,00,000	1,200	125	1,50,000
B	700	200	1,40,000	800	150	1,20,000
C	500	300	1,50,000	600	300	1,80,000
D	300	500	1,50,000	400	600	2,40,000
	2,500		5,40,000	3,000		6,90,000

Calculate in respect of each product,

(i) Sales Value Variance
(ii) Sales Price Variance
(iii) Sales Volume Variance
(iv) Sales Mix Variance **[4×2 =8]**

(b) The following details relating to the Product 'X' during the month March, 2016 are available.
You are required to compute:
(i) Material Price Variance.
(ii) Labour Rate Variance.
Standard Cost per unit:
Materials 50 kg. @ ₹ 40 per kg.
Labour 400 hrs. @ ₹ 1.00 per hour
Actual Cost for the month:
Material 4,900 kgs. @ 42 per kg.
Labour 39,600 hours @ ₹ 1.10 per hour
Actual production—100 units **[2+2=4]**

4. (a) A company manufactures product - A and product - B during the year ending 31st December, 2016, it is expected to sell 15,000 kg. of product A and 75,000 kg. of product B at ₹ 30 and ₹ 16 per kg. respectively. The direct materials P, Q and R are mixed in the proportion of 3: 5: 2 in the manufacture of product A, Materials Q and R are mixed in the proportion of 1:2 in the manufacture of Product B.

The actual and budget inventories for the year are given below:

		OPENING STOCK CLOSING STOCK Kg.	**EXPECTED COST PER KG. Kg.**	**ANTICIPATED ₹**
Material -	P	4,000	3,000	12
	Q	3,000	6,000	10
	R	30,000	9,000	8
Product -	A	3,000	1,500	--
	B	4,000	4,500	--

Prepare the production Budget and Materials Budget showing the expenditure on purchase of materials for the year ending 31-12-2016. **[6]**

(b) A firm received an order to make and supply eight units of standard product which involves intricate labour operations. The first unit was made in 10 hours. It is understood that this type of operations is subject to 80% learning rate. The workers are getting a wages rate of ₹ 12 per hour.

(i) What is the total time and labour cost required to execute the above order?

(ii) If a repeat order of 24 units is also received from the same customer, what is the labour cost necessary for the second order? **[6]**

5. Write short note on any three. **[3 x 4=12]**

(a) Significance of management Accounting

(b) Objectives Of Intercompany Transfer Pricing

(c) Responsibility Accounting:

(d) Limitations of Inter-firm Comparison

PART – B (Financial Management)
Section III

6. Answer the following questions:

(a) Choose the correct answer from the given four alternatives. **[1x6=6]**

(i) Current Assets ₹ 20,00,000; Current Liabilities ₹ 10,00,000 and Stock ` 2,00,000, then what is liquid ratio?
(a) 2 times
(b) 1.8 times
(c) 1.4 times
(d) None of these

(ii) Annual credit sales ₹ 4,00,000; Average collection period 45 days (assume 360 days in a year). What is Average debtors?
(a) ₹ 60,000
(b) ₹ 74,000
(c) ₹ 50,000
(d) ₹ 4,00,000

(iii) Investment in a project is ₹ 200 lakhs and Net Present Value is ₹ 50 lakhs. Then the amount of inflows is :
(a) ₹ 150 lakhs
(b) ₹ 200 lakhs
(c) ₹ 100 lakhs
(d) ₹ 250 lakhs

(iv) PAT of a company ₹ 100 lakhs and share capital (equity shares of ₹ 10 each) is ₹ 50 lakhs, then EPS is:
(a) ₹ 2
(b) ₹ 1
(c) ₹ 10
(d) None of these

(v) Degree of operating leverage is :
(a) EBIT / EBT
(b) Contribution / EBT
(c) Contribution / EBIT
(d) None of these

(vi) Cost of goods sold is ₹8000 and gross margin is ₹5000 then revenue will be
(a) ₹3,000
(b) ₹5,000
(c) ₹8,000
(d) ₹13,000

(b) Match the statement in Column I with the most appropriate statement in Column II : **[1×4 =4]**

	Column I		Column II
i.	Cash Flow Statement	A	Capital Budgeting
ii.	Net working capital	B	Net Sales / Fixed Assets
iii.	Pay Back Period	C	AS – 3
iv.	Fixed Assets Turnover Ratio	D	Current Assets – Current Liabilities

(c) State whether the following statements are True or False **[1x4=4]**

(i) Ratio Analysis is the only technique of analysis of financial statement.

(ii) The difference between the cash receipts and cash payments is the net cash flow provided by (or used in) operating activities.

(iii) Commercial Paper (CP) is a secured promissory note.

(iv) Investment decisions and capital budgeting are same.

Section IV

Answer any three Question from Q. No 7, 8, 9 and 10. Each Question carries 12 Marks

7. (a) The following information is given to you as on 31-03-2016 for a company:

Current Ratio	2.5
Liquid Ratio	1.5
Fixed Assets (net)	1,80,000
Working Capital	60,000
Reserves and Surplus	40,000
Bank Overdraft (Short term)	10,000
Assume that there is no long term loan or fictitious assets.	

Make a statement of proprietary fund and match it with fixed assets and as many details of current assets net of current liabilities. **[8]**

(b) The Balance Sheet of Magna Vision Ltd. as on 31.03.2015 and 31.03.2016 are given below:

Assets	31.03.2015	31.03.2016
Land & Building	8,00,000	6,40,000
Investments	1,00,000	1,20,000
Inventory	4,80,000	4,20,000
Accounts Receivables	4,20,000	9,10,000
Cash & Bank Balance	2,98,000	3,94,000
Total Assets:	20,98,000	24,84,000

Liabilities		
Share Capital	9,00,000	9,00,000
Reserves	6,00,000	6,20,000
Profit and Loss Account	1,12,000	1,36,000
Term Loan	Nil	5,40,000
Current Liabilities	4,86,000	2,88,000
Total Liabilities:	20,98,000	24,84,000

From the fallowing information, you are required to prepare the Statement of Changes in Working Capital. **[4]**

8. (a) A company plans to sell 48000 units next year. The following information is given:

Raw Materials = ₹100(per unit)
Manufacturing expense = ₹30(per unit)
Selling cost = ₹20(per unit)
Selling Price = ₹180 (per unit)
Average Cash balance = ₹1,20,000

The duration at various stages is expected to be as follows:
Raw materials stage 2 months
Work in progress 1 month (Row Materials 100% complete; Manufacturing 25% complete)
Finished goods 1 month
Debtors 1 month
Assume uniform sales of 4000 units per month.
Estimate the gross working capital requirement taking
(i) Debtors at Cost;
(ii) Debtors at Sales Value. **[8]**

(b) Calculate the degree of Operating Leverage and degree of Financial Leverage following firms:

	Firm X
(i) Output (units)	80000
(ii) Variable Cost per unit (₹)	1.50
(iii) Fixed Cost (₹)	10,000
(iv) Interest on Loan Fund (₹)	6,000
(v) Selling price per unit (₹)	2.50

[4]

9. (a) PQR Ltd. operating income (before interest and tax) is ₹11,25,000. The firm's cost of debts is 10% and currently firm employs ₹37,50,000 of debts. The overall cost of capital of firm is 12%. Calculate cost of equity. **[4]**

(b) A limited Company is considering investing a project requiring a capital outlay of ₹ 2,00,000. Forecast for annual income after depreciation but before tax is as follows:

Year	₹
1	1,00,000
2	1,00,000
3	80,000
4	80,000
5	40,000

Depreciation may be taken as 20% on original cost and taxation at 50% of net income. Calculate NPV. **[4+2+2]**

10. Write short note on any three **[3 x 4=12]**

(a) Assumptions of the MM Approach:

(b) Differences between Funds Flow Statement and Cash Flow Statement

(c) Commercial Bill

(d) Significance of Cash Management