Paper 10 – Cost & Management Accounting and Financial Management

Paper 6- Cost & Management Accounting and Financial Management

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

The figures in the margin on the right side indicate full marks.
This paper contains five questions.
All questions are compulsory, subject to instruction provided against each questions.
All workings must form a part of your answer.
Assumptions, if any, must be clearly indicated.

Section A

1. Answer all the following questions.

(a) Multiple choice questions: [3×1=3]

(i) Division of Accounting is divided into

a. 2
b. 3
c. 3
d. None of these

(ii) Revision of budgets is

a. Unnecessary
b. Can't determine
c. Necessary
d. Inadequate data

(iii) This function works like a policeman to ensure the performance of the employees:

a. Controlling
b. Planning
c. Organizing
d. None of these

(b) Match the following: [4×1=4]

Column I	Column II
1. Budget is prepared for a…	A. Contribution / Sales × 100
2. P/V ratio	B. Capital Structure
3. Function of Management	C. Definite period
4. Net Income Approach	D. Planning, Organising, Controlling and Decision making

(c) Fill in the blanks: **[1×4 =4]**

(i) Standards costing are applied in__________ industry.

(ii) Decision-making is a process of choosing among________alternatives.

(iii) In Financial Management EPS stands for _________

(iv) Net Working Capital is the difference between ________

(d) State whether the following statements are true or False: [1×4=4]

(i) It is optional for a company to have financial accounting.

(ii) Excess of Actual cost over Standards Cost is treated as unfavorable variance .

(iii) Cost Accounting is defined as technique and process of ascertaining costs.

(iv) Marginal cost is the Prime cost plus Variable Overheads

(e) Answer the following questions. [2×5=10]

(i) Average collection period of a company is 2 months, Cash sales and average receivables are ₹5,00,000 and ₹6,50,000 respectively. Find the amount of total sales.

(ii) X Ltd Sales during the year 2014-15 is ₹12,00,000; Opening Stock for 2014-15 ₹3,00,000 and Closing stock for 2014-15 ₹1,80,000. Calculate the Inventory turnover ratio

(iii) A firm has sales of ₹40 lakhs; variable cost of ₹25 lakhs; fixed cost of ₹6 lakhs; Calculate operating Leverage.

(iv) If BEP is ₹39,00,000 at 65% level of sales and profit is ₹8,40,000 at 100% level of sales, find out the P/V ratio.

(v) In a factory where standard costing is followed 9,600 kg of materials at ₹10.50/kg were actually consumed resulting in a price variance of ₹ 4,800 (A) and usage variance of ₹4,000 (F). What is the standard cost of actual production?

Section B

I. Answer any one Question from Q. No 2 and 3. Each Question carries 15 Marks

2. (a) VINAK Ltd. operating at 75% level of activity produces and sells two products A and B. The cost sheets of these two products are as under:-

	Product A	Product B
Units produced and sold	600	400
Direct materials (₹)	2.00	4.00
Direct labour (₹)	4.00	4.00
Factory overheads (40% fixed) (₹)	5.00	3.00
Selling and administration overheads (60% fixed) (₹)	8.00	5.00
Total cost (₹)	19.00	16.00
Selling price per unit (₹)	23.00	19.00

Factory overheads are absorbed on the basis of machine hour which is the limiting factor. The machine hour rate is ₹2 per hour. The company receives an offer from Canada for the purchase of Product A at a price of ₹17.50 per unit. Alternatively the company has another offer from the Middle East for the purchase of Product B at a price of ₹15.50 p.u. In both cases, a special packing charge of fifty paise per unit has to be borne by the company. The company can accept either of the two export orders and in the either case the company can supply such quantities as may be possible to produce by utilising the balance of 25% of its capacity.

You are required to prepare:

(i) A statement showing the economics of the two export proposals giving your recommendation as to which the proposal should be accepted, and

(ii) A statement showing the overall profitability of the company after incorporating the export proposal recommended by you. [5+5]

(b) What is the relation between Management Accounting and Cost Accounting? [5]

3. (a) The profit for the year of Push On Ltd. works out to 12.5% of the capital employed and the relevant figures are as under:

	₹
Sales	5,00,000
direct Materials	2,50,000
direct Labour	1,00,000
Variable overheads	40,000
Capital employed	4,00,000

The new sales manager who has joined the company recently estimates for the next year a profit of about 23% on capital employed, provided the volume of sales is increased by 10% and simultaneously there is an increase in selling price of 4% and an overall cost reduction in all the elements of cost by 2%.

Find out by computing in detail the cost and profit for next year, whether the proposal of sales manager can be adopted. [10]

(b) What are the limitations of Inter-firm Comparison? [5]

II. Answer any two Questions from Q. No 4, 5 and 6. Each Question carries 10 Marks

4. (a) 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? [4+3]

(b) What are the significance of Management Accounting. [3]

5. (a) What are the features of Learning Curve. [5]

(b) State the Applications of Marginal Costing. [5]

6. The following is the statement of a Radical Co. for the month of June.

	Products		Total
	L (₹)	M (₹)	(₹)
Sales	60,000	60,000	1,20,000
Variable costs	42,000	30,000	72,000
Contribution	18,000	30,000	48,000
Fixed cost			36,000
Net Income			12,000

You are required to compute the P/V ratio for each product and then compute the P/V Ratio, Breakeven Point and net profit for the following assumption.

(i) Sales revenue divided 60% to Product L & 40% to Product M.

(ii) Sales revenue divided 40% to Product L & 60% to Product M. Also calculate the profit estimated on sales upto ₹1,80,000/- p.m. for each of the sales mix provided above [10]

Section C

Answer any two Questions from Q. No 7, 8 and 9. Each Question carries 20 Marks

7. (a) Sampa Ltd is evaluating a project costing ₹20 lakhs. The Project generates savings of ₹2.95 lakhs per annum to perpetuity. The business risk of the project warrants a rate of return of 15%.

(i) Calculate Base case NPV of the project assuming no tax.

(ii) Assuming Tax Rate of 30% with 14% Cost of Debt constituting 30% of the cost of the project, determine Adjusted Present Value.

(iii) Find out minimum acceptable Base Case NPV, as well as Minimum IRR.

(b) Calculate the level of earnings before interest and tax (EBIT) at which the EPS indifference point between the following financing alternatives will occur.

Combination-I

Equity share capital of ₹6,00,000 and 12% Debentures of ₹ 4,00,000.

Combination-II

Equity share capital of ₹ 4,00,000, 14% Preference share capital of ₹ 2,00,000 and 12% Debentures of ₹4,00,000.

Assume the corporate tax rate is 30% and par value of equity share is ₹100 in each case. [3+4=7]

(c) Explain the term Foreign Currency Convertible Bonds (FCCBs). [5]

8. (a) A company operates at a production level of 10,000 units. The contribution is ₹68 per unit, operating leverage is 7.5, and combined leverage is 30. If tax rate is 30%. Estimate the earnings after tax. [5]

(b) The directors of Virat Limited are contemplating the purchase of a new machine to replace a machine which has been in operation in the factory for the last 5 years.

Ignoring interest but considering tax at 30% of net earnings, suggest which of the two alternatives should be preferred. The following are the details:

Particulars	Existing Machine	New Machine
Purchase price	₹1,40,000	₹2,10,000
Estimated life of machine	10 years	10 years
Machine running hours per annum	2,000	2,000
Units per hour	12	18
Wages per running hour	3	5.25
Power per annum	2,000	4,500
Consumables stores per annum	6,000	7,500
All other charges per annum	8,000	9,000
Materials cost per unit	1.00	1.00
Selling price per unit	2.50	2.50

You may assume that the above information regarding sales and cost of sales will hold good throughout the economic life of each of the machines. Depreciation has to be charged according to straight-line method. [9]

(c) List out the needs of Capital Budgeting Decisions. [6]

9. (a) State the assumption of MM Approach. [5]

(b) PKJ Limited has made plans for the next year 2015-16. 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 [10]

(c) In considering the most desirable capital structure of a company, the following estimates of the cost of debt and equity capital (after tax) have been made at various levels of debt equity mix:

Debt as percentage 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 required to determine the optimal debt-equity mix for the company by calculating composite cost of capital. [5]