Paper 10- Cost & Management Accounting And Financial Management

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

Answer Question No. 1 which is compulsory Carries 25 Marks

1.(a) Match the statement in Column I with the most appropriate statement in Column II.

[1×4 =4]

Column I	Column II
1. A budget is a plan of action expressed in…	**A.** Management by Exception
2. Uniform Costing	**B.** Management
3. Management accounting is a tool to	**C.** Profitability rate
4. Angle of Incidence	**D.** All business activities

(b) Choose the correct answer from the given four alternatives. **[1 x3=3]**

(i) Decision-making is involved in the following function/s of management

A. Planning
B. Organizing
C. Controlling
D. All the above functions

(ii) Fixed cost is 30,000 and P/V ratio is 20%. Compute breakeven point.

A. ₹ 160,000
B. ₹ 150,000
C. ₹ 155,000
D. ₹ 145,000

(iii) Difference between standard cost and actual cost is called as

A. Wastage
B. Loss
C. Variance
D. Profit

(c) Fill in the blanks: **[1×4 =4]**

(i) Management Accounting is ----------------- in its orientation.

(ii) Revision of budget is -----------

(iii) When sales are ₹300,000 and variable cost is ₹180,000, P/V ratio will be ----------------

(iv) The term window dressing means-------------of accounts.

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

(i) NPV is Non-Discounted Cash Flow Technique of Capital Budgeting.

(ii) Variable cost per unit is variable.

(iii) A flexible budget recognises the difference between fixed, semi-fixed and variable cost and is designed to change in relation to the change in level of activity.

(iv) Standard formats are used in management accounting for preparation of reports.

(e) Answer the following **[2x5=10]**

(i) The following information relates to budgeted operations of Division P of a manufacturing company.

Particulars	Amount in ₹
Sales – 50,000 units @ ₹ 8	4,00,000
Less: Variable Costs @ ₹ 6 per unit	3,00,000
Contribution margin	1,00,000
Less: Fixed Costs	75,000
Divisional Profits	25,000

The amount of divisional investment is ₹1,50,000 and the minimum desired rate of return on the investment is the cost of capital of 20%. Calculate

a. Divisional expected ROI and

b. Divisional expected RI

(ii) Standard cost of material for output of 2,600 units is ₹71,500 and actual output is 2,550 units. If material mix variance is ₹ 1,095 adverse, find out material usage variance.

(iii) The budgeted annual sales of a firm are ₹80 lakhs and 25% of the sales are cash sales. If the average amount of debtors of the firm is ₹5 lakhs, what will be the average collection period of credit sales?

(iv) B's cash flows are ₹1,000 on 01.07.2014; ₹1,100 on 01.07.2016; ₹1,000 on 01.07.2018; Considering annual rests, interest rate of 10% and using p.v. factor only up to one decimal, calculate the present value of his cash flows as on 01.07.2016.

(v) Cost of the machine is ₹80,000; estimated scrap value is ₹10,000. Working life 8 years. The machine had to be discarded at the end of 4th year due to obsolescence and was sold for ₹ 10,000. Calculate the resultant loss. (Use straight line depreciation on net value).

Section A

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

2.(a) The monthly budgets for manufacturing overhead of SHAHEEN LTD. for two levels of activity were as follows:

Capacity	60%	100%
Budgeted production	600	1,000
	₹	₹
Wages	1,200	2,000
Consumable stores	900	1,500
Maintenance	1,100	1,500
Power & Fuel	1,600	2,000
Depreciation	4,000	4,000

Insurance	1,000	1,000
	9,800	12,000

Required:

(i) Indicate which of the items are fixed, variable and semi-variable;

(ii) Prepare a Budget for 80% capacity; and

(iii) Find the total cost, both fixed and variable per unit of output at 60%, 80% and 100% capacity.

[3+4+3=10]

(b) Following data is available for T.T.D & Co.:

Standard working hours 8 hours per day 5 days per week

Maximum capacity	50 employees
Actual working	40 employees
Actual hours expected to be worked per four weeks	6,400 hours
Standard hours expected to be earned per four weeks	8,000 hours
Actual hours worked in the four-week period	6,000 hours
Standard hours earned in the four week period	7,000 hours

The related period is of 4 weeks. In this period there was a special one day holiday due to national event. Calculate the following ratios:

(I) Efficiency ratio,**(II)** Activity ratio, **(III)** Calendar ratio, **(IV)** Standard capacity usage ratio, **(V)** Actual capacity usage ratio. **[5]**

3.(a) What are the objectives of Inter Company transfer pricing **[6]**

(b) N Ltd., engaged in the manufacture of the two products _A‘ and _B‘ gives you the following information:

	Product A	**Product B**
	₹	₹
Selling Price per unit	60	100
Direct materials per unit	20	25
Direct wages per unit @ ₹ 0.50 per hour	10	15
Variable overhead	100% of direct wages	
Fixed overhead	₹ 10,000 per annum	
Maximum capacity	1,000 units	

Show the contribution of each of the products A and B and recommend which of the following sales mix should be adopted:

1. 300 units of product A and 600 units of product B;
2. 450 units of product A and 450 units of product B;
3. 600 units of product A and 300 units of product B. **[9]**

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

4. X Chemical Ltd. manufacture two products AB and CD by making the raw material in the proportion shown:

Raw Material	**Product AB**	**Product CD**
A	80%	
B	20%	
C		50%
D		50%

The finished weight of products AB and CD are equal in the weight of in gradients. During the month of June, it is expected that 60 tons of AB and 200 tons of CD will be sold

Actual and budgeted inventories for the month of June as follows:

	Actual Inventory (1st June) Quantity (Tons)	**Budgeted Inventory (30th June) Quantity (Tons)**
A	15	20
B	10	40
C	200	300
D	250	200
Product AB	10	5
Product CD	50	60

The purchase price of materials for June is expected to be as follows:

Material	**Cost per ton (₹)**
A	500
B	400
C	100
D	200

All materials will be purchased on 3rd of June, Prepare:

(i) The Production Budget for the month of June,

(ii) The Material Requirement budget for June,

(iii) The Material Purchase Budget indicating the expenditure for material for the month of June. **[3+3+4]**

5.(a) A company fixes the inter-divisional transfer prices for its products on the basis of cost plus an estimated return on investment in its divisions. The relevant portion of the budget for the Division X for the year 2015 -16 is given below:

Particulars	Amount in ₹
Fixed Assets	5,00,000
Current Assets (other than debtors)	3,00,000
Debtors	2,00,000
Annual fixed cost for the division	8,00,000
Variable cost per unit of product	10
Budgeted volume of production per year (units)	4,00,000
Desired Return on Investment	28%

You are required to determine the transfer price for Division X. **[5]**

(b) What is the role of management accounting in management process? **[5]**

6. The Dynamic company has three divisions. Each of which makes a different product. The budgeted data for the coming year are as follows:

	A (₹)	**B (₹)**	**C (₹)**
Sales	1,12,000	56,000	84,000
Direct Material	14,000	7,000	14,000
Direct Labour	5,600	7,000	22,400
Direct Expenses	14,000	7,000	28,000

Fixed Cost	28,000	14,000	28,000
	61,600	35,000	93,400

The Management is considering to close down the division C'. There is no possibility of reducing fixed cost. Advise whether or not division C' should be closed down. **[10]**

Section B

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

7.(a) Calculate — (I) Stock turnover ratio, (II) Debtors' turnover ratio (in number of days) and (III) Working capital turnover ratio from the following information:
Sales (all credit): ₹ 10,00,000;
Stock: ₹ 90,000;
Debtors: ₹ 20,000;
Sundry creditors: ₹ 60,000;
Bills payable: ₹ 30,000;
Provision for taxation: ₹ 10,000;
Gross profit: ₹ 1,50,000;
Marketable securities: ₹ 40,000 ;
Cash at Bank: ₹ 20,000. **[6]**

(b) Explain the Stable Dividend Policy. Why should it be followed? **[2+3]**

(c) Calculate the Degree of Operating Leverage (DOL), Degree of Financial Leverage (DFL) and the Degree of Combined Leverage (DCL) for the following firms and interpret the results.

	Firm K	**Firm L**	**Firm M**
1. Output (Units)	60,000	15,000	1,00,000
2. Fixed costs (₹)	7,000	14,000	1,500
3. Variable cost per unit (₹)	0.20	1.50	0.20
4. Interest on borrowed funds (₹)	4,000	8,000	----
5. Selling price per unit (₹)	0.60	5.00	0.10

[3+3+3]

8.(a) X Ltd., has 8 lakhs equity shares outstanding at the beginning of the year 2005. The current market price per share is ₹120. The Board of Directors of the company is contemplating ₹6.4 per share as dividend. The rate of capitalisation, appropriate to the risk-class to which the company belongs, is 9.6%:

(i) Based on M-M Approach, calculate the market price of the share of the company, when the dividend is – (a) declared; and (b) not declared.

(ii) How many new shares are to be issued by the company, if the company desires to fund an investment budget of ₹3.20 crores by the end of the year assuming net income for the year will be ₹1.60 crores? **[3+3+4]**

(b) A review, made by the top management of GUPTA LTD. which makes only one product, of the result of first quarter of the year revealed the following:

Sales in units	10,000
Loss in ₹	25,000
Fixed cost (for the year ₹1,20,000) in	75,000
Variable cost per unit in ₹	20

The Finance Manager who feels perturbed suggests that the company should at least break even in the second quarter with a drive for increased sales. Towards this, the company should introduce a better packing which will increase the cost by ₹1.25 per unit.
The Sales Manager has an alternate proposal. For the second quarter additional sales promotion expenses can be increased to the extent of ₹12,500 and a profit of ₹12,500 can be aimed at for the period with increased sales.
The Production Manager feels otherwise. To improve the demand, the selling price per unit has to be reduced by 3 per cent. As a result the sales volume can be increased to attain a profit level of ₹10,000 for the quarter.
The Managing Director asks you as a Cost Accountant to evaluate these three proposals and calculate the additional Sales Volume that would be required in each case, in order to help him take a decision. **[2+8=10]**

9.(a) A Company is considering two mutually exclusive projects. Project K will require an initial cash investment in machinery of ₹ 2,68,000. It is anticipated that the machinery will have a useful life of ten years at the end of which its salvage will realise ₹20,500. The project will also require an additional investment in cash, Sundry debtors and stock of ₹40,000. At the end of five years from the commencement of the project balancing equipment for ₹45,000 has to be installed to make the unit workable. The cost of additional machinery will be written off to depreciation over the balance life of the project. The project is expected to yield a net cash flow (before depreciation) of ₹1,00,000 annually.
Project R, which is the alternative one under consideration, requires an investment of ₹3,00,000 in machinery and as in Project K investment in current assets of ₹40,000. The residual salvage value of the machinery at the end of its useful life of ten years is expected to be ₹25,000. The annual cash inflow (before depreciation) from the project is worked at ₹80,000 p.a. for the first five years and ₹1,80,000 per annum for the next five years.
Depreciation is written off by the Company on sum-of-the years' digits method, (i.e., if the life of the asset is 10 years, then in the ratio of 10, 9, 8 and so on). Income tax rate is 50%. A minimum rate of return has been calculated at 16%. The present value of ₹ 1 at interest of 16% p.a. is 0.86, 0.74, 0.64, 0.55, 0.48, 0.41, 0.35, 0.30, 0.26 and 0.23 for years 1 to 10 respectively.
Which Project is better? Assuming no capital gains taxes, calculate the Net Present Value of each Project. **[10]**

(b) Explain the debt-service coverage ratio. **[4]**

(c) Distinguish between financial lease and an operating lease. **[6]**