Paper 10 – Cost & Management Accounting and Financial Management

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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. **[3×1=3]**

(a) Multiple choice questions:

(i) The use of management accounting is

A. Compulsory

B. Optional

C. Mandatory as per the law

D. None of the above

(ii) Which of the following departments is most likely responsible for a price variance in direct materials?

A. Warehousing

B. Receiving

C. Purchasing

D. Production

(iii) Decision-making concerns the

A. Past

B. Future

C. Past and future both

D. None of the above

(b) Match the following: **[4×1=4]**

Column I	Column II
1. Management accounting is composed of.	A. the Tandon Committee
2. Variance Analysis	B. Fixed
3. Variable cost per unit	C. Management and Accounting
4. some industries covered by	D. Technique to assist inter-firm comparison

(c) Fill in the blanks: **[1×4 =4]**

(i) A GDR is a ________ Instrument.

(ii) Management Accounting tailors _______information to meet the specific needs of management.

(iii) If Profitability Index is 1, cash inflow and cash outflow would be __________

(iv) Inter firm comparison is the technique of evaluation of _______________

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

(i) IRR and NPV always give the same profitability ranking.

(ii) Any form of accounting, which enables a business to be conducted more efficiently can be regarded as Management Accounting.

(iii) At breakeven point, contribution available is equal to total fixed cost.

(iv) Standard costing works on the principle of exception.

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

(i) 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.

(ii) 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)

(iii) SHAAN LTD. earned a profit of ₹3,00,000 during the year 2014-15. If the marginal cost and selling price of a product are ₹80 and ₹100 per unit respectively, find out the amount of 'Margin of Safety'.

(iv) Bharat Ltd. is preparing its cash budget for the period. Sales are expected to be ₹1,00,000 in April 2016, ₹2,00,000 in May 2016, ₹3,00,000 in June 2016 and ₹1,00,000 in July 2016. Half of all sales are cash sales, and the other half are on credit. Experience indicates that 70% of the credit sales will be collected in the month following the sale, 20% the month after that, and, 10% in the third month after the sale. Calculate the budgeted collection for the month of July 2016.

(v) Optimistic Ltd has an EPS of ₹90 per share. Its Dividend Payout Ratio is 40%. Its earnings and dividends are expected to grow at 5% per annum. Find out the cost of Equity Capital if its Market Price is ₹360 per share.

Section B

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

2. (a) Division A is a profit centre that produces three products X, Y and Z and each product has an external market. The relevant data is as:

	X	Y	Z
External market price per unit (₹)	48	46	40
Variable cost of production (division A) (₹)	33	24	28
Labour hours per unit (division A)	3	4	2
Maximum external sales units	800	500	300

Up to 300 units of Y can be transferred to an internal division B.

Division B has also the option of purchasing externally at a price of ₹ 45 per unit.

Determine the transfer price for Y the total labour hours available in division A is:

(i) 3800 hours

(ii) 5600 hours [4+4]

(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? [5+2]

3. (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

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]

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

4. A practicing Cost Accountant now spends ₹0.90 per k.m. on taxi fares for his client's work. He is considering to other alternatives the purchase of a new small car or an old bigger car.

Item	New Small Car	Old bigger Car
Purchase price (₹)	35,000	20,000
Sale price after 5 years (₹)	19,000	12,000
Repairs and servicing per annum (₹)	1,000	1,200

Taxes and insurance p.a. (₹)	1,700	700
Petrol consumption per liter (K.m.)	10	7
Petrol price per liter (₹)	3.5	3.5

He estimates that he does 10,000 K.m. annually. Which of the three alternatives will be cheaper? If his practice expands he has to do 19,000 Km p.a. which is cheaper? Will cost of the two cars break even and why? Ignore interest and Income-tax. [10]

5. (a) Explain the features of Marginal Costing. [5]

(b) What are the reasons for using Learning Curve? [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

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 C

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)** Difference between factoring and discounting. [5]

(b)

From the following data, compute the duration of the operating cycle for each of years:	Year1 (₹)	Year2 (₹)
Stock:		
Raw materials	20,000	27,000
Work-in-progress	14,000	18,000
Finished goods	21,000	24,000
Purchases	96,000	1,35,000
Cost of goods sold	1,40,000	1,80,000
Sales	1,60,000	2,00,000
Debtors	32,000	50,000
Creditors	16,000	18,000

Assume 360 days per year for computational purposes. (c) [10]

What are the limitations of Fund Flow Statement? [5]