Paper 10- COST & MANAGEMENT ACCOUNTING AND FINANCIAL MANAGEMENT

Paper 10- Cost & Management Accounting and Financial Management

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

This paper is divided into two Sections A & B, each carrying 50 marks.
Further each Section has been divided into two Parts.

SECTION – A Cost and Management Accounting

PART- I

Answer Question Number 1. All parts of this question are compulsory.

1. **Answer the following questions:**

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

(i) The selling price is Rs.20 per unit , variable cost Rs.16 , the breakeven points in units is 4000 units, what is the fixed cost?
(a) Rs. 20,000
(b) Rs. 16,000
(c) Rs. 26,000
(d) None of the above

(ii) Budget period depends upon
(a) The nature of budget
(b) Type of budget
(c) The length of trade cycle
(d) All of the above

(iii) Which of the following operating measures would to see decreasing over time?
(a) Merchandise inventory turnover
(b) Percentage of on-time deliveries
(c) Total quality cost
(d) Finished goods inventory turnover

(iv) The use of management accounting is :
(a) none of the above
(b) optional
(c) mandatory as per the law
(d) compulsory

(v) Which of the following is incorrect :
(a) Learning curve may be applied to direct labour and material.
(b) Learning curve is a cost reduction technique.
(c) Learning curve is a mathematical technique.
(d) Learning curve concept provides a means of evaluating the effectiveness of training program

(vi) Revision of budget is:
(a) Unnecessary
(b) Inadequate data
(c) can't determine
(d) necessary

(B) Match the following: **[4×1=4]**

	Column 'A'		Column 'B'
1.	Margin of safety	a.	Management
2.	Budget is prepared for	b.	Definite period
3.	Management accounting is a tool to	c.	Profit / PV ratio
4.	Calendar variance	d.	Standard rate per hour × deficit hour worked

(C) Say True or False for the following question: **[4×1=4]**

(i) Management Accounting reports are internal document.

(ii) Break even means the volume of production or sale where there is Supernormal profit

(iii) Zero based budgeting cannot be used for decision making.

(iv) A fixed budget is prepared for more than one level of activity.

PART II

Answer any Three questions from question numbers 2 to 5. Each question carries 12 marks (12×3=36)

2. (a) A company wants to buy a new machine to replace one due to obsolescence. It received offers for two models A and B. Further details regarding these models are given below:

	A	B
Installed capacity (units)	20,000	20,000
Fixed overhead per annum (Rs.)	2,40,000	1,00,000
Estimated profit at the above capacity (Rs.)	1,60,000	1,00,000

The product manufactured using this type of machine (A or B) is sold at Rs.100 per unit.
You are required to determine:
(i) sales required to recover fixed cost.

(ii) the level of sales at which both model will earn same profit.

(iii) the model suitable for different levels of demand for the product. [4]

(b) P Engineering Company has received an once – off export order for its sole product that would require the use of half of the factory's total capacity, which is estimated at Rs. 4 lakhs units per annum. The condition of the export order is that it has to be accepted in full: acceptance of part quantity is not allowed.

The factory is currently operating at 60% level to meet the demand of its domestic customers. As against the current price of Rs. 6.00 per unit, the export offer is Rs. 4.70 per unit, which is less than the total cost of current production.

The cost breakdown is given below: (Rs. per unit)

Direct material	2.40
Direct labour	1.00
Variable expenses	0.60
Fixed overhead	1.00
Total cost	5.00

The company has the following options:
(i) Accept the export order and cut back domestic sales as necessary.

(ii) Remove the capacity constraint by installing necessary balancing equipment and also by working overtime to meet both domestic and export demand. This will increase fixed overhead by Rs. 15,000 annually and additional cost for overtime work will amount to Rs. 40,000 for the year.
(iii) Appoint a subcontractor to manufacture the additional requirement and meet the domestic and export requirement in full by supplying raw materials, paying a conversion charge @ Rs.2.00 per unit and appointing a supervisor at a salary of Rs. 3,000 per month for checking the quality of the product and controlling operations at the manufacturing unit.
(iv) Refuse the order.

Required:
(a) Compute the profits from each of these options & calculate incremental profits compared to the 1st option.
(b) Your recommendation, with reason, as to which of these options the company should decide upon. [8]

3. (a) Y ltd. has furnished the following data:

	Budget	Actual
		July 2022
No of working days	25	27
Production in units	20,000	22,000
Fixed overhead	30,000	31,000

Budgeted fixed overhead rate is Rs.1 per hour. In July 2022 the actual hour worked were 31,500 hours.

Calculate the following variances:
1. Fixed overhead efficiency variance
2. Fixed overhead capacity variance
3. Fixed overhead calendar variance
4. Fixed overhead volume variance
5. Fixed overhead expenditure variance
6. Total OH Cost Variance [6]

(b) S Ltd. presents the following information for September, 2022:
Budgeted production of product OP = 200 UNITS.
Standard consumption of Raw Material = 2 kg per unit of OP
Standard price of material = Rs.6 per kg.
Actually 250 units of OP were produced and material X was purchased at Rs.8 per kg and consumed at 1.8 kg per unit of OP. Calculate the material cost variances. [6]

4.(a) Production costs of A Ltd. are as follows:

	Level of activity		
	60%	70%	80%
Output (in units)	1,200	1,400	1,600
Costs			
Direct materials	24,000	28,000	32,000
Direct labour	7,200	8,400	9,600
Factory overhead	12,800	13,600	14,400
Work cost	44,000	50,000	56,000

A proposal to increase production to 90% level of activity is under the consideration of management. The proposal is not expected to involve any increase in fixed factory overheads.
Prepare a statement of cost at 90% level of activity. [6]

(b) ABC ltd. which is a system of assessment of Divisional Performance on the basis of residual income has two divisions, Beta and Gamma. Beta has annual capacity to manufacture 15,00,000 numbers of a special component that it sells to outside customers, but has idle capacity.

The budgeted residual income of Gamma is Rs.1,20,00,000 while that of Beta is Rs.1,00,00,000. Other relevant details extracted from the budget of Beta for the current years were as follows:

Particulars	
Sale (outside customer)	12,00,000 units @ Rs.180 per unit
Variables cost per unit	Rs.160
Divisional fixed cost	Rs.80,00,000
Capital employed	Rs.7,50,00,000
Cost of capital	12%

Gamma has just received a special order for which it requires components similar to the ones made by Beta. Fully aware of the idle capacity of Beta, Gamma has asked Beta to quote for manufacture and supply of 3,00,000 numbers of the components with a slight modification during final processing. Beta and Gamma agree that this will involve an extra variable cost of ₹ 5 per unit.

You are required to calculate; the transfer price which Beta should quote to Gamma to achieve its budgeted residual income. [6]

5. Short notes (any three questions out of four questions) [3×4=12]

(a) 'Control' as a function of management accounting.
(b) Zero-based budgeting (ZBB)
(c) Factors affecting Learning Curve
(d) Limitations of Uniform Costing

SECTION- B Financial Management

PART- I

Answer Question Number 6. All parts of this question are compulsory

6. Answer the following questions:

(A) Choose the correct answer from the given four alternatives. [1×6=6]

(i) Preference shares must be redeemed within a period of ___________ from the date of issue.
(a) 20 yrs
(b) 50 yrs
(c) 30yrs
(d) 10 yrs

(ii) Which of the following is not a source of short term finance
(a) Euro Debt Issue
(b) Factoring
(c) Certificate of deposit
(d) Commercial paper

(iii) _______________ ratio is the indicator of the firm's commitment to meet its short term liabilities.
(a) Proprietary ratio
(b) Super quick ratio
(c) Current ratio
(d) Quick ratio

(iv) SPO refers to ___________________, the second and subsequent time a company raises money from the public directly.
(a) Second Public Offering
(b) Subsequent Public Offer
(c) Subsequent Public Offering
(d) Seasonal Public Offering

(v) Investment decision is concerned with :
(a) Raising of Capital
(b) Capital- mix or capital structure of a firm
(c) Distribution of profits of a firm to the shareholders
(d) Selection of asset in which funds will be invested by a firm

(vi) Which of the following is not a characteristics of GDR:
(a) Freely traded in the international market
(b) Shares underlying the GDR carry voting rights
(c) Investors earn fixed income by way of dividend
(d) GDR is a negotiable instrument.

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

	Column I		Column II
1	Stochastic Model	A	Upper control limit and lower control limit.
2	Pay -out ratio	B	Dividend per equity share/ earning per equity share
3	ECB	C	Short term lease
4	Operating lease	D	External Commercial Borrowings

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

(i) Operating leverage reflects the impact of change in Fixed Cost on the level of operating profits of the firm.
(ii) Ratio analysis helps to measure the profitability position.
(iii) The motive behind holding Working Capital is to meet the business exigencies and to do the regular business transaction
(iv) A deposit made by one bank to another company normally for a period upto 4 months is referred to as inter corporate deposit.

PART – II

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

7.(a) A company has a profit margin of 25% and asset turnover of 3 times. What is the company's return on investment? How will this return on investment vary if?
(i) Profit margin is decreased by 5%?
(ii) Asset turnover is decreased to 2 times?
(iii) Profit margin is increased by 5% and asset turnover is increased to 4 times? [6]

(b) The following are the summary of cash transactions extracted from the books of AB Ltd.

(Rs. '000)

Balance as on 1st July , 2021	70
Cash received from sales	5,566
Issue of shares	610
Sale of fixed assets	262
	6,508
Payments to suppliers	4,094
Payments for fixed assets	466
Payments for overhead	230
Wages and salaries	138
Taxation	486
Dividend	170
Repayment of bank loans	500
	6084
Balance as on 30th June , 2022	424

You are required to prepare a Cash Flow Statement of the company for the period ended 30th JUNE 2022 in accordance with Accounting standard -3(revised). **[6]**

8.(a) C Ltd. currently has sales of Rs.33,00,000 with an average Credit period of 2 months. At present no discounts are offered to the customers. The management of the company is thinking of offering a discount of 2% on cash sales which may results in:

(a) the average collection period would reduce to one month.

(b) 50% of customers would take advantage of 2% discount.

(c) the company normally requires a 25% return on its investment.

What is the profit if it extends discount on cash sales. **[4]**

(b) The following financial data have been furnished by A LTD. and B LTD. for the year ended 31-3-2022.

Particulars	A LTD.	B LTD.
Operating leverage	2:1	4:1
Financial leverage	3:1	3:1
Interest charge per annum	Rs.12 lakhs	Rs.10 lakhs
Corporate tax rate	40%	40%
Variable cost as % of sales	60%	50%

Prepare income statement of the two companies. **[8]**

9. (a) Alpha Ltd. is proposing to sell a 6 year bond off 6,000 at 5% rate of interest per annum. The bond amount will be amortised equally over its life. If he expects a minimum rate of return of 10%, what is the maximum price he should pay? **[4]**

(b) A Ltd. has decided to purchases a machine to augment the company's installed capacity to meet the growing demand for its products. There are two machines under consideration of the management. The relevant details including estimated yearly expenditure and sales are given below: all sales are on cash basis. corporate income – tax rate is 40 %. Interest on capital may be assumed to be 10%.

Particulars	Machine X (Rs.)	Machine Y (Rs.)
Initial investment required	4,00,000	2,00,000
Estimated annual sales	6,00,000	4,00,000
Cost of production (estimated):		
Direct materials	50,000	50,000
Direct labour	40,000	40,000
Factory overheads	60,000	40,000
Administration costs	20,000	10,000
Selling and distribution costs	10,000	10,000

The economic life of machine X is 2 years, while it is 3 years for the second machine. The scrap values are Rs. 40,000 and Rs. 25,000 respectively. You are required to find out the best machine based on 'Payback Method'. [8]

10. Write short notes on any three out of four questions: [3×4=12]

(a) Global Depository Receipt (GDR)

(b) Importance of Cash Management

(c) Significance of funds flow statement

(d) Factoring