Paper 10- COST MANAGEMENT ACCOUNTING AND FINANCIAL MANAGEMENT

Paper 10- Cost and 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

1. Answer the following questions:

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

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

(ii) The selling price is ₹20 per unit , variable cost ₹ 16 , and fixed cost ₹16000, the breakeven point in unit will be :
- **(a)** 800 units
- **(b)** 2000 units
- **(c)** 4000 units
- **(d)** None of the above

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

(iv) Revision of budget is :
- **(a)** Unnecessary
- **(b)** can't determine
- **(c)** necessary
- **(d)** Inadequate data.

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

(vi) 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 concept provides a means of evaluating the effectiveness of training program.
(d) Learning curve is a mathematical technique.

(B) Match the following: **[4×1=4]**

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

(C) Say True or False for the following question: **[4×1=4]**
(i) Management Accounting reports are public document.
(ii) Break even means the volume of production or sale where there is huge loss/profit.
(iii) Zero based budgeting cannot be used for decision making .
(iv) A flexible budget is prepared for more than one level of activity.

PART –II
Answer any three questions out of four questions

2. (a) A company wants to buy a new machine to replace one which is having frequent breakdown . It received offers for two models Z1 and Z2. Further details regarding these models are given below :

	Z1	Z2
Installed capacity (units)	20,000	20,000
Fixed overhead per annum (₹)	2,40,000	1,00,000
Estimated profit at the above capacity (₹)	1,60,000	1,00,000

The product manufactured using this type of machine (Z1 or Z2) is sold at ₹100 per unit .
You are required to determine :
(i) break- even level of sales for each model.
(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 . **[6]**

(b) Pinnacle 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 ₹ 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 ₹ 6.00 per unit , the export offer is ₹ 4.70 per unit, which is less than the total cost of current production.

The cost breakdown is given below: (₹ 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 ₹ 15,000 annually and additional cost for overtime work will amount to ₹ 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 @ ₹ 2.00 per unit and appointing a supervisor at a salary of ₹ 3,000 per month for checking the quality of the product and controlling operations at the manufacturing unit.
(iv) Refuse the order.

Required:
(a) A statement of costs and profits under each of the above four options.
(b) Your recommendation, with reason, as to which of these options the company should decide upon. **[6]**

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

	Budget	Actual
		July 2018
No of working days	25	27
Production in units	20,000	22,000
Fixed overhead	30,000	31,000

Budgeted fixed overhead rate is ₹1 per hour. In July 2018 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 **[6]**

(b) SHALL Ltd. presents the following information for September, 2018:
Budgeted production of product PQ = 200 UNITS.
Standard consumption of Raw Material= 2 kg per unit of PQ.
Standard price of material= ₹ 6 per kg.
Actually 250 units of PQ were produced and material A was purchased at ₹8 per kg and consumed at 1.8 kg per unit of PQ. 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 (in ₹)			
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) XYZ ltd. which is a system of assessment of Divisional Performance on the basis of residual income has two divisions, Alfa and Beta. Alfa 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 beta is ₹1,20,00,000 while that of Alfa is ₹1,00,00,000. Other relevant details extracted from the budget of Alfa for the current years were as follows:

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

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

You are required to calculate, the transfer price which Alfa should quote to Beta 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

6. Answer the following questions:

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

(i) Investment decision is concerned with :

(a) Selection of asset in which funds will be invested by a firm

(b) Capital- mix or capital structure of a firm

(c) Distribution of profits of a firm to the shareholders

(d) None of the above.

(ii) Which of the following is not a source of short term finance -

(a) Commercial paper

(b) Certificate of deposit

(c) Factoring

(d) Euro Debt Issue.

(iii) Which of the following is not a characteristics of GDR :

(a) Freely traded in the international market

(b) Investors earn fixed income by way of dividend

(c) Shares underlying the GDR carry voting rights.

(d) GDR is a negotiable instrument.

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

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

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

(B) Match the statement in Column I with the most appropriate statement in column II: [1x4=4]

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

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

(i) Operating leverage reflects the impact of change in sales on the level of operating profits of the firm**.**
(ii) Ratio analysis helps to measure the liquidity position**.**
(iii) The motive behind holding a cash is to meet the business exigencies and to do the regular business transaction.
(iv) A deposit made by one company 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 and 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 increased by 5%?
(ii) Asset turnover is decreased to 2 times?
(iii) Profit margin is decreased 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 Samik ltd. **(₹ '000)**

Balance as on 1st July , 2017	70
Receipts from customer	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 , 2018	424

You are required to prepare a Cash flow Statement of the company for the period ended 30th JUNE 2018 in accordance with Accounting standard -3(revised) . **[6]**

8.(a) Swam ltd. currently has sales of ₹33,00,000 with an average period of 2 months .At present no discounts are offered to the customers . The management of the company is thinking to allow a discount of 2% on cash sales which results in :
(a) the average collection period would reduce to one month.
(b) 50% of customer would take advantage of 2% discount.
(c) the company normally requires a 25% return on its investment .
Advise the management whether to extend discount on cash sales or not . **[4]**

(b) The following financial data have been furnished by SIMPLE LTD. and DIMPLE LTD. for the year ended 31-3-2018.

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

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

9.(a) PQR is proposing to sell a 6 –year bond of ₹ 6,000 at 5% rate of interest per annum . The bond amount will be amortised equally over its life. What is the bond's present value for an investor if he expects a minimum rate of return of 10%? **[4]**

(b) PESICO ltd. have decided to purchases a machine to augment the company's installed capacity to meet the growing demand for its products. There are three 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	Machine1 (₹)	Machine 2 (₹)
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 1 is 2 years , while it is 3 years for the second machine. The scrap values are ₹ 40,000 and ₹25,000 respectively. You are required to find out the most profitable investment 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