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

1. Answer the following questions:

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

(i) Division of Accounting is divided into
- **(a)** 2
- **(b)** 3
- **(c)** 4
- **(d)** None of the above.

(ii) Sales budget shows the sales detail as
- **(a)** Month wise
- **(b)** Area wise
- **(c)** Product wise
- **(d)** All of the above

(iii) Which of the following can be used to calculate the material price variance :
- **(a)** (AQ - SQ) ×SP
- **(b)** (AP –SP) × AQ
- **(c)** (AP –SP) × SQ
- **(d)** (AQ – SQ) × AP

(iv) Which of the following is often the cause of differences between actual and standard costs of materials and labour?
- **(a)** Price changes for materials
- **(b)** Excessive labour hours
- **(c)** Excessive use of material
- **(d)** All of the above

(v) Planning and control are done by :
- **(a)** Top management
- **(b)** Lowest level of management
- **(c)** All levels of management
- **(d)** None of the above

(vi) If standard hours are 400 @ ₹1 per hour and actual hours are 380 @ ₹1.50 per hour, the labour rate variance is:

(a) ₹20 (Favorable)
(b) ₹25 (Favorable)
(c) ₹100 (Adverse)
(d) ₹190 (Adverse)

(B) Match the following: **[4×1=4]**

	Column 'A'		Column 'B'
1.	Sales value variance	A.	Cost of goods during the year/ average inventory
2.	Fixed asset ratio	B.	Limiting factor
3.	Constraint on various resources	C.	Ideal ratio is 0.67
4.	Stock turnover ratio	D.	Budgeted sales – Actual sales

(C) Say True or False for the following question: **[4×1=4]**
(i) Uniform costing is a method of costing.
(ii) Management Accounting tailors non –financial information to meet the specific needs of management.
(iii) When fixed cost is deducted from total cost, we get marginal cost.
(iv) Standard costing works on the principle of exception.

PART II
Answer any three questions out of four questions

2.(a) A Spanish soft drink company is planning to establish a subsidiary company in India to produce mineral water . Based on the estimated annual sales of 50,000 bottles of the mineral water, cost studies produced the following estimates for the Indian subsidiary :

	Total annual costs	% of total annual cost which is variable
Material	2,10,000	100%
Labour	1,50,000	80%
Factory overhead	92,000	60%
Administration expenses	40,000	35%

The Indian production will be sold by manufacturer's representatives who will receive a commission of 8% of the sale price . No portion of the Spanish office expenses is to be allocated to the Indian subsidiary. Required :

(i) Compute the sales price per bottle to enable the management to realize an estimated 10% profit on sale proceeds in India.
(ii) Calculate the break-even point in Rupee sales and also in number of bottles for the Indian subsidiary on the assumption that the sale price is ₹ 14 per bottle. **[8]**

(b) A mobile manufacturing company finds that while it costs ₹ 6.25 each to make a component Y- 2370, the same is available in the market at ₹ 5.50 with an assurance of a continued supply . The breakeven of cost is :

Direct material	₹ 2.50
Direct labour	₹ 2.00
Other variables	₹0.50

Depreciation and other fixed cost	₹ 1.25
Total	₹ 6.25

(i) Should you make or buy ?
(ii) What would be your decision if the supplier offers the component at ₹ 4.85 each ?
[4]

3.(a) The following information is related to labour of Aditya Ltd. engaged in a week of November 2018 for Job –SH. :

	Skilled workers	Semi-skilled workers	Unskilled workers	Total
Standard no. of workers in the gang	16	12	8	36
Standard wage rate per hour (₹)	60	30	10	-
Actual no. of workers employed in the gang during the week	12	16	8	-
Actual wage rate per hour (₹)	70	20	20	-

In a 40 hours week, the gang produced 1080 standard hours. The actual number of semi-skilled workers is two times of the actual number of unskilled workers. Total number of actual workers is same as standard gang. The rate variance of semi skilled workers is ₹6,400 (F). You are required to find the following:
a. The actual number of workers/labours in each category.
b. Labour gang (mix) variance.
c. Labour sub-efficiency variance.
d. Labour rate variance.
e. Labour cost variance. **[7]**

(b) The share of total production and the cost based fair price computed separately for each of the four units in industry are as follows :

	(₹) per unit			
Share of production	40 %	25%	20%	15%
Material costs	150	200	100	180
Direct labour	200	100	270	170
Depreciation	200	200	100	100
Other overhead	300	300	280	240
	850	800	750	690
20% return on capital employed	628	430	350	230
Fair price	1428	1230	1100	920
Capital employed per unit is worked out as follows :				
Net fixed assets	3000	2000	1600	1000
Working capital	140	150	150	150
Total	3,140	2,150	1,750	1,150

Indicate with reasons ,what should be the uniform price fixed for the product. **[5]**

4.(a) Compute a flexible budget from the following data :

Planned level of activity	80,000 units ₹	80,000 to 1,00,000 units ₹	1,00,000 to 1,20,000 units ₹

Selling price	2	2	1.8
Variable cost per unit:			
Material	70 ps	65ps	58ps
Labour	50ps	55ps	60ps
Overhead	40ps	40ps	40ps
Fixed cost	30,000	30,000	20,000

What figures would you use for a comparison with the actual figure if 1,05,000 units are made and sold ? **[6]**

(b) Calculate the expected average units cost of making
(a) 8 machines and (b) 16 machines using the data below:
Direct Labour need to make first machine = 900 hrs.
Learning curve = 80%
Direct Labour cost =₹20/- per hour
Direct materials cost = ₹ 2,00,000
Fixed cost for either size orders = ₹80,000.

[6]

5. Short notes (any three questions out of four questions) **[3×4=12]**
(a) Master Budget
(b) Significance of Management Accounting
(c) Transfer pricing
(d) Prerequisites of Uniform Costing System

SECTION- B (Financial Management)
PART- I

6. Answer the following questions:

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

(i) The maturity period of commercial paper usually ranges from :
(a) 90 days to 360 days
(b) 6 months
(c) 91 days to 360 days
(d) 90 days

(ii) Which of the following are measures of Leverage -
(a) Operating leverage
(b) Financial leverage
(c) Combined Leverage
(d) All of the above.

(iii) NPV is positive indicates :
(a) Cash inflows are generated at a rate higher than the minimum required by the firm.
(b) Cash inflows are generated at a rate equal to the minimum required
(c) Cash inflows are generated at a rate lower than the minimum required by the firm.
(d) None of the above

(iv) Current Assets ₹ 20,00,000 ; Current Liabilities ₹10,00,000 and Stock ₹4,00,000, then what is liquid ratio?

(a) 2 times
(b) 1.6 times
(c) 1.4 times
(d) None of these

(v) Investment in a project is ₹ 200 lakhs and Net Present Value is ₹70 lakhs. Then the amount of inflows is **:**
(a) ₹130 lakhs
(b) ₹ 200 lakhs
(c) ₹ 100 lakhs
(d) ₹ 270 lakhs

(vi) The term ______________means manipulation of accounts in a way so as to conceal vital facts and present the financial statements in a way to show a better position than what it actually is.
(a) Window dressing
(b) Creative accounting
(c) Window accounting
(d) Modified accounting

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

	Column I		Column II
1	Term loan	A	Foreign Currency Convertible Bonds
2	P/E Ratio	B	Long term finance
3	Value of right	C	Cum-right share price – Ex-right share price
4	FCCBs	D	Market price per equity share/Earning per share.

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

(i) Commercial paper is a secured short term promissory note.
(ii) Gross working capital refers to the total of the current assets
(iii) Financial management deals with planning and mobilization of funds required by firm.
(iv) Current ratios are used for measuring the short term solvency of an entity.

PART – II

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

7.(a) The following accounting information and financial ratios of Star sunshine Ltd. relate to the year ended 31-3-17 :

(i) Accounting information

Direct wages	10% of works cost
Stock of raw material	3 months' usage
Stock of finished goods	6% of works cost
Raw material consumed	20% of works cost
Debt collection period	60 days
Gross profit	15% of sales
Net profit	8% of sales

All sales are on credit	

(ii) Ratios

Fixed asset to sales	1:3
Fixed assets to current assets	13:11
Current ratios	2
Long term loan to current liability	2:1
Capital to reserve and surplus	1:4

If value of fixed assets as on 31-3-2017 amounted to ₹26 lakhs, prepare a balance sheet of the company for the year ended 31-3-2018. [8]

(b) From the following calculate cash from operations :

Particulars	₹ '000	Particulars	₹ '000
To salaries	4,000	By gross profit	25,000
To depreciation	2,000	By profit on sale of land	4,000
To rent	2,000	By income tax refund	4,000
To goodwill written off	3,000		
To provision for tax	6,000		
To proposed dividend	5,000		
To net profit	11,000		
	33,000		33,000

[4]

8 .(a) A trader whose current sales are in the region of ₹ 6,30,000 per annum and an average collection period of 30 days wants to pursue a more liberal policy to improve sales. A study made by a management consultant reveals the following information :

Credit policy	Increase in collection period	Increase in sales	Present default
P	10 days	₹ 30,000	1.5%
Q	20 days	₹48,000	3%
R	30 days	₹75,000	2%
S	45 days	₹90,000	4%

The selling price per unit is ₹ 3. Average cost per unit is ₹ 2.25 and variable cost per unit are ₹2.

The current bad debt loss is 1%. Required return on additional investment is 20%.
Assume a 360 days year.
Which of the above policies would you recommend for adoption ? **[6]**

(b) Mitra Ltd.'s capital structure on 31-3-2009 includes 50,000equity shares of ₹ 100 each , 10,000 debenture of ₹ 150 each carrying 15% rate of interest and term loan of ₹ 20,00,000 repayable in 7 years period with 18% rate of interest.
Matri Ltd.'s balance sheet shows the following capital structure :
20,000 equity shares of ₹ 100 each
32,000 preference share of ₹ 100 each (12%)
General reserve of ₹ 5,00,000
Security premium account ₹ 3,00,000
25,000 14% fully secured Non- convertible debenture of ₹ 100 each
From the above data you are required to calculate the leverage of both the firms and compare with each other. **[6]**

9.(a) Zakhir & Joya Co. has a capital structure of 30% debt and 70% equity .The company is considering various investment proposals costing less than ₹30 lakhs. The company does not want to disturb its present capital structure . The cost of raising the debt and equity are as follows :

Project cost	Cost of debt	Cost of equity
Above ₹ 5 lakhs	8%	14%
Above ₹ 5 lakhs and upto ₹20 lakhs	9%	15%
Above ₹20 lakhs and upto ₹40 lakhs	10%	16%
Above ₹ 40 lakhs and upto ₹1 crore	11%	16.50%

Assuming the tax rate is 50%, compute the cost of two projects A and B, whose fund requirements are ₹9 lakhs and ₹23 lakhs respectively. If the project are expected to yield after tax of 11%, determine under what condition if would be acceptable. **[5]**

(b) A company manufacturing electronic equipments is currently buying 'component X' from a local supplier at a cost of ₹35 each. The company has a proposal to install a machine for the manufacture of the component .Two alternatives are available as under :

(i) Installation of semiautomatic machine involving annual fixed expenses of ₹20 and variable cost of ₹15 per component manufactured .

(ii) Installation of automatic machine involving an annual fixed cost of ₹ 25 lakhs and a variable cost of ₹ 10 per component manufactured

Required :

1) Find the annual requirement of components to justify a switch over from purchases of components to (i) manufacture of the same by installing semi – automatic machine and (ii) manufacture of the same by installing automatic machine.
2) If the annual requirement of the component is 5,00,000 units , which machine would you advise the company to install?
3) At what annual volume would you advice the company to select semiautomatic machine instead of automatic machine? **[7]**

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

(a) Wealth maximisation
(b) Foreign Currency Convertible Bonds (FCCBs).
(c) Assumptions of Walter Model
(d) Limitations of Funds Flow Statement.