

**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.

[1x6=6]

- (i) Accounting has the following number of branches :
 - (a) 2
 - (b) 3
 - (c) 4
 - (d) None of the above.
- (ii) Sales details as shown in Sales budget are :
 - (a) Area wise
 - (b) Month wise
 - (c) Product wise
 - (d) All of the above
- (iii) Which of the following can be applied to calculate the Material Price Variance?
 - (a) $(AQ - SQ) \times SP$
 - (b) $(AP - SP) \times AQ$
 - (c) $(AQ - SQ) \times AP$
 - (d) $(AP - SP) \times SQ$
- (iv) Which of the following is / are often the cause(s) 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) Which level of management does Planning and control ?
 - (a) Lowest level of management
 - (b) Top management
 - (c) All levels of management
 - (d) None of the above
- (vi) What will be the the Labour Rate Variance, if Standard Hours are 400 @ ₹1 per hour and Actual Hours are 380 @ ₹1.50 per hour:

- (a) ₹170 (Favorable)
- (b) ₹190 (Favorable)
- (c) ₹170 (Adverse)
- (d) ₹190 (Adverse)

(B) Match the following:

[4×1=4]

| | Column 'A' | | Column 'B' |
|----|---------------------------------|----|---|
| 1. | Stock Turnover Ratio | A. | Limiting factor |
| 2. | Fixed Asset Ratio | B. | Budgeted Sales – Actual Sales |
| 3. | Sales Value Variance | C. | Ideal Ratio is 0.67 |
| 4. | Constraint on various resources | D. | Cost of goods during the year/ average inventory |

(C) Say True or False for the following question:

[4×1=4]

- (i) **Uniform Costing** is not a method of costing.
- (ii) Management Accounting tailors non – financial information to meet the specific needs of management.
- (iii) Marginal Cost is arrived at by deducting Fixed Cost from Total Cost
- (iv) Standard costing works on the principle of exception.

PART II

Answer any Three questions from question numbers 2 to 5. Each question carries 12 marks

(12×3=36)

- 2.(a) A foreign soft drink company is planning to establish a 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 company has an overall P/V Ratio of 60%. If the variable cost of a product is ₹ 20, what will be its selling price? [4]

- 3.(a) The following information is related to labour of A Ltd. engaged in a week of December 2022 for Job – X:

| | 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 Rs.6,400 (F). You are required to find the following:

- The actual number of workers/labours in each category.
- Labour Gang (Mix) Variance.
- Labour Sub-Efficiency Variance.
- Labour Rate Variance.
- Labour Cost Variance.

[8]

- (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.

[4]

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 per unit | 2 | 2 | 1.8 |
| Variable cost per unit: | | | |
| Material | 0.70 | 0.65 | 0.58 |
| Labour | 0.50 | 0.55 | 0.60 |
| Overhead | 0.40 | 0.40 | 0.40 |
| 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) Prerequisites of Uniform Costing System
(b) Advantages of Management Accounting
(c) Transfer pricing
(d) Master Budget

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) 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) 1.4 times
(b) 1.6 times
(c) 2 times
(d) None of these
- (v) If the Investment in a project is ₹200 lakhs and Net Present Value (NPV) is ₹70 lakhs, then the amount of cash inflows is:
(a) ₹100 lakhs
(b) ₹130 lakhs
(c) ₹200 lakhs
(d) ₹270 lakhs

- (vi) _____ 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.
- Window dressing
 - Creative accounting
 - Window accounting
 - Modified accounting

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

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

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

- Commercial paper is a secured short term promissory note.
- Gross Working Capital refers to the total value of current assets
- Financial Management deals with planning and mobilization of funds required by firm.
- Current Ratio is used for measuring the long 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 SS Ltd. relate to the year ended 31-3-2021:

(i) Accounting information

| | |
|-------------------------|-------------------|
| Direct Wages | 10% of Works Cost |
| 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 |

(ii) Ratios

| | |
|-------------------------------------|-------|
| Fixed Asset to Sales | 1:3 |
| Fixed Assets to Current Assets | 13:11 |
| Current Ratio | 2 |
| Long term Loan to Current Liability | 2:1 |
| Capital to Reserve and Surplus | 1:4 |

If value of Fixed Assets as on 31-3-2021 amounted to Rs.26 lakhs, prepare a Balance Sheet of the company for the year ended 31-3-2022. [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 businessman 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) M Ltd.'s capital structure on 31-3-2022 includes 50,000 equity shares of ₹100 each, 10,000 debentures 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.

M 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) Z & J Co. has a capital mix of 30% debt and 70% equity. It is considering various investment proposals costing less than Rs.30 lakhs. The company does not want to disturb its present capital mix . 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 Rs.9 lakhs and Rs.23 lakhs respectively. If the project are expected to yield after tax of 11%, determine under what condition it would be acceptable. [5]

- (b) A company manufacturer of electronic equipment's is currently buying 'Component X' from a local supplier at a cost of ₹35 each. It has received a proposal to install a machine for the manufacture of the component. Two alternatives are available as under:

- (i) Installation of semi-automatic 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) Limitations of Funds Flow Statement.
- (b) Assumptions of Walter Model
- (c) Foreign Currency Convertible Bonds (FCCBs).
- (d) Wealth maximization