

**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)** Management accounting is concerned with data collection from \_\_\_\_\_.
- (a) internal sources
  - (b) external sources
  - (c) internal and external sources
  - (d) internal or external sources
- (ii)** An opportunity cost is the cost of
- (a) lost business
  - (b) unplanned new business
  - (c) obtaining new business opportunities
  - (d) the next best alternative course of action:
- (iii)** Which of the following is not an example of functional budget?
- (a) Production budget
  - (b) Cost of production budget
  - (c) Materials budget
  - (d) None of the above
- (iv)** Standard cost of material for output of 2,600 units is ₹ 71,500 and actual output is 2,550 units. If material mix variance is ₹ 1,095 adverse, what will be the material usage variance?
- (a) ₹1375 (Adverse)
  - (b) ₹ 2470 (Adverse)
  - (c) ₹1570 (Adverse)
  - (d) ₹2400 (Favourable)
- (v)** In cost accounting, purpose of variance analysis is to:
- (a) understand reasons for variances.
  - (b) take remedial measures.
  - (c) improve future performances
  - (d) All of the above.

- (vi) Learning curve theory is not applicable to
- (a) Direct labour
  - (b) Material
  - (c) Spoilage and defective works
  - (d) Overhead

**(B) Match the following:**

**[4×1=4]**

	Column 'A'		Column 'B'
1.	Budgetary control provides basis for	A.	Unavoidable fixed cost
2.	Cost Accounting	B.	Encourages slack
3.	General Account Overhead	C.	Suitable information to operating management
4.	Incremental Budgeting	D.	Remuneration plan

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

**[4×1=4]**

- (i) The information in the management accounting system is used for three different purposes.
- (ii) When sales value (₹) is the limiting factor, products are ranked based on Profit Volume ratio.
- (iii) One of the principles of responsibility accounting is 'a target is fixed for each department or responsibility center.
- (iv) Idle time variance is always favourable.

**PART -II**

**Answer any three questions out of four questions**

**[12×3=36]**

2. (a) Fastride Cycle Ltd. purchases 20,000 bells p.a. from outside supplier at ₹ 10 each. The management feels that these be manufacture the item within the factory. A machine costing ₹ 50,000 will be required to manufacture the item within the factory. The machine has an annual capacity of 30,000 units and life of 5 years . The following additional information are available:

Labour cost = ₹ 2  
Material cost per bell will be = ₹ 4  
Variable overheads = 100% of labour cost

You are required to advise whether:

- (i) The company should continue to purchase the bells from outside supplier or should make them in the factory; and
- (ii) The company should accept an order to supply 5,000 bells to the market at a selling price of ₹8.5 per unit?

**[4]**

## MTP\_Intermediate\_Syllabus 2016\_JUNE\_2020\_Set 2

- (b) A factory is capable of operating 5000 machine hours during a month interchangeable for any one or more products Gamma, Alpha & Beta. The following details are ascertained:

Products	No. of units per 100 hours	Material cost per unit (₹)
Gamma	25	5
Beta	50	3
Alpha	100	2

- (1) Labour cost per machine hour ₹2; variable overhead per machine hour ₹3.
- (2) The fixed cost of the department per month is ₹10,000.
- (3) The share capital is ₹5,40,000 and the directors expected 20% profit (before taxation).
- (4) All financial expenses are included in the cost.

The following three proposals are to be considered:

- (i) To fix the selling price by adding 20% on cost.
- (ii) To use marginal costing technique for price fixation.

Evaluate the aforesaid three proposals and select the best proposal.

**[8]**

3. (a) From the following particulars for a period reconcile the actual profit with the budgeted profit.

	Budgeted (₹ Lac)	Actual (₹ Lac)
Direct Material	50.00	66.00
Direct Wages	30.00	33.00
Variable overheads	6.00	7.00
Fixed overheads	10.00	12.00
Net Profit	4.00	8.50
	100.00	126.50

Actual material price and wage rates were higher by 10%. Actual sales prices are also higher by 10%.

**[8]**

- (b) A manufacturing co. operates a costing system and showed the following data in respect of the month of November:

Actual no. of working days	22
Actual man hours worked during the month	8,600
No. of products produced	850
Actual overhead incurred	3,600
Relevant information from the company's budget and standard cost data is as follows :	
Budgeted no. of working days per month	20
Budgeted man hours per month	8,000
Standard man hours per month	10
Standard overhead rate per month per hour	50p.

You are required to calculate:

1. FOH Efficiency Variance
2. FOH Capacity Variance.

**[2+2=4]**

4. (a) A manufacturing company has two division – Q and P. Division Q is mainly engaged in production of an electronic device and Division P packs and labels the product and sells it in the market. Division Q supplies 25,000 units of the product per month to P for packaging and labeling. Division Q incurs ₹16 as the variable cost for the product and fixed cost of ₹9,00,000 per year. Investment in fixed asset is ₹9,30,000. The division plans to have 12% return on fixed asset as normal profits. Division P incurs ₹10 per product as variable expenses for packaging and marketing.

- (i) Find the Transfer Price per unit of the product that Division Q can charge for transfer to P.
- (ii) What will be profit of Division P if it can sell all the products in the market at ₹ 80 per unit?
- (iii) If Division P can sell only 15,000 units of the product per month and asks Division Q to supply 15,000 units, what will be the effect on the effect on the Transfer Price and the profits of the divisions? **[2+3+2=7]**

(b) As a Cost and Management Accountant of Prachin Ltd., prepare a Sales Overhead Budget for the months of January, February and March from the estimates given below:

Expenses per month:	₹
Advertisement	3,000
Salaries of the Sales Department	4,500
Expenses of the Sales Department	1,500
Counter Salesmen's Salaries and Dearness Allowance	6,000

Commission to counter salesmen @ 1% on their sales.

Travelling salesmen's commission @ 10% on their sales and expenses @ 5% on their sales.

The sales during the period were estimated as under:

Month	Counter sales	Travelling salesmen sales
	₹	₹
January	80,000	12,000
February	1,20,000	13,000
March	1,40,000	20,000

**[5]**

5. Short notes (any three questions out of four questions)

**[3×4=12]**

- (a) Principal Budget Factor
- (b) Differential Cost Analysis
- (c) Negotiated Pricing
- (d) Differences between Absorption costing and Marginal 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)** ROI (Return on Investment) can be decomposed into the following ratios:
- (a) Overall Turnover Ratio and Current Ratio
  - (b) Net Profit Ratio and Fixed Assets Turnover
  - (c) Working Capital Turnover Ratio and Net Profit Ratio
  - (d) Net Profit Ratio and Overall Turnover Ratio.
- (ii)** "Shareholders' wealth" in a firm is reflected by:
- (a) the number of people employed in the firm.
  - (b) the book value of the firm's assets less the book value of its liabilities.
  - (c) the amount of salary paid to its employees.
  - (d) the market price per share of the firm.
- (iii)** Which of the following is not a source of fund?
- (a) Issue of Capital
  - (b) Issue of Debenture
  - (c) Decrease in Working Capital
  - (d) Increase in Working Capital.
- (iv)** If EBIT = ₹ 1,00,000, Fixed Assets = ₹ 2,00,000, Sales = ₹ 10,00,000 and Variable Cost = ₹7,00,000. Then, the Operating Leverage will be
- (a) 2
  - (b) 3
  - (c) 6
  - (d) 4
- (v)** Which one of the following activities is outside the purview of dividend decision in financial management?
- (a) Identification of the profit after taxes
  - (b) Measurement of the cost of funds
  - (c) Deciding on the pay-out ratio
  - (d) Considering issue of bonus shares to equity shareholders.
- (vi)** Which of the following statements is correct?
- (a) A higher Receivable Turnover is not desirable.
  - (b) Interest Coverage Ratio depends upon Tax Rate.
  - (c) Increase in Net Profit Ratio means increase in Sales.
  - (d) Lower Debt-Equity Ratio means lower Financial Risk.

## MTP\_ Intermediate\_ Syllabus 2016\_ JUNE\_ 2020\_ Set 2

**(B) Match the statement in Column I with the most appropriate statement in column II:**

**[1x4=4]**

	Column I		Column II
1	Dividend policy has no effect on its value of assets	A	Graham & Dodd
2	Learning Curve	B	Fixed Costs are charged to Cost of Production
3	Absorption Costing	C	Human Phenomenon
4	Market Price of share will increase when company declares dividend rather than when it does not	D	Modigliani & Miller

**(C) State whether the following statements are True or False.**

**[1x4=4]**

- (i) A Depository Receipt in the US market is called American Depository Receipt (ADR).
- (ii) Net Present Value method cannot serve as the best decision criteria for selection of projects when they are mutually exclusive
- (iii) Debt Service Coverage Ratio indicates the liquidity of a firm in relation to its ability to meet projected daily expenditure from operations.
- (iv) Bill Discounting is defined as the relationship between the seller of goods and a financial firm, called the Factor.

### PART-II

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

7. (a) The following is the summary of Financial Ratios and form of a TEXTILE COMPANY having a sale of ₹ 32 lakh:

Sales to net worth (times)	2.3
Current debt to net worth (%)	42
Total debt to net worth (%)	75
Current ratio(times)	2.9
Net sales to inventory (times)	4.7
Fixed asset to net worth (%)	53.2

#### Proforma Balance Sheet

Net worth	-----	Fixed assets	-----
Long -term debt	-----	Cash	-----
Current debt	-----	Stock	-----
		Sundry debtors	568889
	-----		-----

You are required to complete the Proforma Balance Sheet.

**[6]**

## MTP\_Intermediate\_Syllabus 2016\_JUNE\_2020\_Set 2

- (b) Compute cash provided from operations during the year 2018, from the following data:

Particulars	April 1, 2018	March 31, 2019
Sundry debtors	60,000	80,000
Sundry creditors	96,000	60,000
Outstanding expenses	6,000	12,000
Outstanding income	2,000	3,000
Stock- in – trade	1,10,000	1,20,000
Prepaid expenses	6,000	4,000
Accumulated depreciation (no retirement during the year )	1,00,000	1,20,000
Provision for doubtful account	3,000	4,000
Dividend payable	-----	6,000
Bills receivable	20,000	24,000
Bills payable	16,000	12,000
Net income (as per profit and loss account )	----	1,60,000

**[6]**

8. (a) M.R garments Ltd. manufactures readymade garments and sell them on credit basis through a network of dealers. Its present sale is ₹120 lakh per annum with 20 days credit period. The company is contemplating an increase in the credit period with a view to increase sales. Present variable costs are 70% of sales and the total fixed costs ₹16 lakhs per annum. The company expects pre-tax return on investment @ 25%. Some other details details are given as under:

Proposed credit policy	Average collection period (days)	Expected annual sales (₹ in lakhs )
I	30	130
II	40	140
III	50	148
IV	60	150

Which credit policy should the company adopt? Present your answer in a tabular form. Assume 360 days a year. Calculation should be made upto two digits after decimal.

**[6]**

- (b) The following information are supplied to you:

	(₹)
Total Earnings	2,00,000
No. of equity shares (of ₹ 100 each)	20,000
Dividend Paid	1,50,000
Price/Earning Ratio	12.5

- (i) Ascertain whether the company is the following an optimal dividend policy.  
 (ii) Find out what should be the P/E ratio at which the dividend policy will have no effect on the value of the share.  
 (iii) Will your decision change, if the P/E ratio is 8 instead of 12.5?

**[6]**



9. (a) Calculate the WACC using the following data by using:

- (i) Book value weights
- (ii) Market value weights

The capital structure of the company is as under:

	(₹)
Debentures (₹100 per debenture)	5,00,000
Preference shares (₹100 per share)	5,00,000
Equity shares (₹10 per share)	10,00,000
Total	20,00,000

The market prices of these securities are:

Debentures ₹ 105 per debenture

Preference shares ₹ 110 per preference share

Equity shares ₹ 24 each.

Additional information:

- (1) ₹ 100 per debenture redeemable at par, 10% coupon rate, 4% floatation costs, 10 year maturity.
- (2) ₹ 100 per preference share redeemable at par, 5% coupon rate, 2% floatation cost and 10 year maturity.
- (3) Equity share has ₹ 4 floatation cost and market price ₹ 24 per share.

The next year expected dividend is ₹1 with annual growth of 5%. The firm has practice of paying all earnings in the form of dividend.

Corporate tax rate is 50%.

**[6]**

(b) Ram Ltd. specialize in the manufacture of novel transistors. They have recently developed technology to design a new radio transistor capable of being used as an emergency lamp also. They are quite confident of selling all the 8,000 units that they would be making in a year. The capital equipment that would be required will cost ₹25 lakhs. It will have an economic life of 4 years and no significant terminal salvage value.

During each of the first four years promotional expenses are planned as under:

Year	1	2	3	4
Advertisement	1,00,000	75,000	60,000	30,000
Others	50,000	75,000	90,000	1,20,000
Variable cost of production and selling expenses: ₹ 250 per unit				

Additional fixed operating costs incurred because of this new product are budgeted at ₹75,000 per year.

The company's profit goals call for a discounted rate of return of 15% after taxes on investments on new products. The income tax rate on an average works out to 40%. You can assume that the straight line method of depreciation will be used for tax and reporting.

Work out an initial selling price per unit of the product that may be fixed for obtaining the desired rate of return on investment.

Present value of annuity of ₹1 received or paid in a steady stream throughout 4 years in the future at 15% is 3.0079. **[6]**

**10. Write short notes on any three out of four questions:**

**[3×4=12]**

- (a) Net Income Approach
- (b) Financial Leverage
- (c) Combined Leverage
- (d) Internal Rate of return