

INTERMEDIATE EXAMINATION

June 2017

*P-10(CMA)
Syllabus 2012*

Cost and Management Accountancy

Time Allowed: 3 Hours

Full Marks: 100

The figures in the margin on the right side indicate full marks.

All workings must form part of your answer. Assumptions, if any, must be clearly indicated.

Please: (1) Write answers to all parts of a question together.

(2) Open a new page for answer to a new question.

(3) Attempt the required number of questions only.

SECTION – A

(25 Marks)

Answer Question No.1 which is compulsory.

1. Answer the following:

2×5=10

(a) Choose the correct answer from the given four alternatives.

- (i) In two consecutive periods, sales and profit were ₹ 1,60,000 and ₹ 8,000 respectively in the first period and ₹ 1,80,000 and ₹ 14,000 respectively during the second period. If there is no change in fixed cost between the two periods, then P-V ratio must be:
- (A) 20%
- (B) 25%
- (C) 30%
- (D) 40%
- (ii) Budgeted sales for the next year is 5,00,000 units. Desired ending finished goods inventory is 1,50,000 units and equivalent units in ending W-I-P inventory is 60,000 units. The opening finished goods inventory for the next year is 80,000 units, with 50,000 equivalent units in beginning W-I-P inventory. How many equivalent units should be produced?
- (A) 5,80,000
- (B) 5,50,000
- (C) 5,00,000
- (D) 5,75,000

Please Turn Over

- (iii) Akash Ltd. is preparing its cash budget for the period. Sales are expected to be ₹ 1,00,000 in April, 2016; ₹ 2,00,000 in May, 2016; ₹ 3,00,000 in June, 2016 and ₹ 1,00,000 in July, 2016. Half of all sales are cash sales and the other half are on credit.

Experience indicates that 70% of the credit sales will be collected in the month following the sale, 20% the month after that and, 10% in the third month after the sale.

The budgeted collection for the month of July, 2016 is:

- (A) ₹ 1,30,000
(B) ₹ 1,80,000
(C) ₹ 2,60,000
(D) ₹ 3,60,000

- (iv) During the month of March, 560 kg. of material was purchased at a total cost of ₹ 15,904. The stock of material increased by 15 kg. It is the company's policy to value the stocks at standard purchase price. If the material price variance was ₹ 224 (A), the standard price per kg. of material is:

- (A) ₹ 28.40
(B) ₹ 28.80
(C) ₹ 28.00
(D) ₹ 29.20

- (v) Output of a Process is 2,500 units. normal loss is 10% of input and abnormal loss is 200 units. How many units were introduced in the Process?

- (b) (i) What types of Educational Services are covered under the Companies (Cost Records and Audit) Rules, 2014? 3

- (ii) Whether separate Form CRA-2 is required to be filed by a company having two or more different types of products covered under cost audit? 2

- (c) Match the Column 'A' with Column 'B'. 5

Column 'A'		Column 'B'	
1.	Transfer Price	(A)	Goal Congruence
2.	Zero Base Budgeting	(B)	Responsibility Accounting
3.	Performance Budgeting	(C)	Performance Measurement
4.	Throughput Accounting	(D)	Notional Profit
5.	Profit Earned on a Contract Account	(E)	Not on the Basis of Trends

- (d) The average cost of a product is given by the following function:

$$\text{Average cost} = x^3 + 10x^2 - 9x.$$

Find the total cost, average variable cost and marginal cost.

5

SECTION – B

(Cost and Management Accounting — Methods & Techniques and Cost Records & Cost Audit)

Answer any three questions.

17×3=51

2. (a) A review of the result of the first quarter of the year made by the top management of M/s. SS Ltd., which makes only one product, revealed the following:

Sales in units	10,000
Loss	₹ 10,000
Fixed cost (for the year ₹ 1,20,000)	₹ 30,000
Variable cost per unit	₹ 8

The Finance Manager who feels perturbed suggests that the company should at least break-even in the second quarter with a drive for increased sales. Towards this, the company should introduce a better packing which will increase the cost by ₹ 0.50 per unit.

The Sales Manager has an alternative proposal. For the second quarter, additional sales promotion expenses can be increased to the extent of ₹ 5,000 and a profit of ₹ 5,000 can be aimed at during the period with increased sales.

The Production Manager feels otherwise. To improve the demand, the selling price per unit has to be reduced by 3%. As a result, the sales volume can be increased to attain a profit level of ₹ 4,000 for the quarter.

The Managing Director asks you as a Cost Accountant to evaluate the three proposals, calculate the P/V ratio and additional sales volume that would be required in each case and suggest which proposal should be accepted.

12

- (b) What is differential cost? State the essential features of differential cost.

2+3=5

3. (a) M.J. Ltd. manufactures 4 products, viz., A, B, C and D. The data relating to production activity are as under :

Product	Quantity of Production (units)	Material Cost/Unit ₹	Direct labour hours/unit	Machine hours/unit	Direct labour cost/unit ₹
A	1,000	10	1	0.50	6
B	10,000	10	1	0.50	6
C	1,200	32	4	2.00	24
D	14,000	34	3	3.00	18

The Production overheads are as under:

	₹
• Overhead applicable to machine oriented activity	1,49,700
• Overhead relating to ordering materials	7,680
• Set up costs	17,400
• Administration overheads for spare parts	34,380
• Material handling costs	30,294

The following further information have been compiled:

Product	No. of set up	No. of material orders	No. of times materials handled	No. of spare parts
A	3	3	6	6
B	18	12	30	15
C	5	3	9	3
D	24	12	36	12

Required:

- Select a suitable cost driver for each item of overhead expense and calculate the cost per unit of cost driver.
 - Using the concept of activity based costing, compute the factory cost per unit of each product. 5+7=12
- (b) Distinguish between Cost Control and Cost Reduction. 5

4. (a) The cost of an article at a capacity level of 10,000 units is given under A below. For a variation in capacity above or below this level, the individual expenses vary as indicated in B below:

	A(₹)	B
Material Cost	50,000	100% varying
Labour Cost	30,000	100% varying
Power	3,000	80% varying
Repairs and Maintenance	3,500	80% varying
Stores	2,000	100% varying
Inspection	800	25% varying
Depreciation	10,000	100% varying
Administrative Overhead	3,600	25% varying
Selling Overhead	4,500	50% varying
Total	1,07,400	
Cost per unit	10.74	

Find out the unit cost of the product under each individual expenses at production level of 8000 units and 12000 units.

10

- (b) What is meant by inter firm comparison? Briefly explain its benefits.

3+4=7

5. (a) A company fixes the inter-divisional transfer prices for its products on the basis of cost *plus* an estimated return on investment in its division. The relevant portion of the budget for Division A for the year 2016-17 is given below:

Fixed assets	₹ 5,00,000
Current assets (other than debtors)	₹ 3,00,000
Debtors	₹ 2,00,000
Annual fixed cost of the division	₹ 8,00,000
Variable cost per unit of product	₹10
Budgeted volume of production per year (units)	400000
Desired return on investment	28%

You are required to determine the transfer price for the Division A.

7

- (b) Prepare a Cash Budget for the three months ending on 30th June, 2018 from the information given below:

(i)

Month	Sales (₹)	Materials (₹)	Wages (₹)	Overheads (₹)
February	14,000	9,600	3,000	1,700
March	15,000	9,000	3,000	1,900
April	16,000	9,200	3,200	2,000
May	17,000	10,000	3,600	2,200
June	18,000	10,400	4,000	2,300

(ii) Credit terms are:

Sales : 10% sales are on cash, 50% of the credit sales are collected in the next month and the balance in the following month.

Creditors -Materials 2 months
-Wages $\frac{1}{4}$ month
-Overheads $\frac{1}{2}$ month

(iii) Cash and Bank balance on 1st April, 2018 is expected to be ₹ 6,000.

(iv) Other relevant information are:

- Plant and Machinery will be installed in February, 2018 at a cost of ₹ 96,000. The monthly instalments of ₹ 2,000 is payable from April onwards.
- Dividend @ 5% on Preference Share Capital of ₹ 2,00,000 will be paid on 1st June.
- Advance to be received for sale of vehicles ₹ 9,000 in June.
- Dividends from investments amounting to ₹ 1,000 are expected to be received in June.
- Income tax (advance) to be paid in June is ₹ 2,000. 10

6. (a) State the significance of different Forms in Companies (Cost Records & Audit) Rules, 2014. 8
- (b) Draw a flow chart of applicability of Cost Audit Rule-4 for Regulatory and Non-regulatory sectors under Companies (Cost Records and Audit) Rules, 2014. 5
- (c) Mention any eight (8) headings prescribed in Form CRA-1 for maintaining cost records. 4

SECTION – C

(Economics for Managerial Decision Making)

Answer any two from the following.

12×2=24

7. (a) The Demand Curve for X is given by the equation:

$p = 24 - \frac{1}{2}\sqrt{q}$, where p and q denote price and quantity respectively. Find the point price elasticity for $p = ₹ 12$. 6

- (b) Shadow prices are imputed values — Discuss. 6

8. (a) Given, $c = x^3 - 10x^2 + 9x$; $R = 12x^2 + 11x - 4$. Find the total profit and marginal profit. 8
(b) Critically examine the COBB-DOUGLAS production function. 4
9. (a) Fiscal or Budgetary Policies in India are designed to achieve certain objectives. Explain. 6
(b) Discuss briefly the Pricing Policies based on market conditions. 6
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