## INTERMEDIATE EXAMINATION

December 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 answers to a new question.
- (3) Attempt the required number of questions only.

#### SECTION-A

### (25 Marks)

Answer Question No.1 which is compulsory.

1. Ansv	wer the following: 1×5=5
(a)	Choose the correct answer from the given four alternatives to fill in the gap.
	(i) is an innovation introduced for the first time in the world and India with a view
	to regulate industries on Healthy and Sound line.
	(A) Cost Audit
	(B) Cost Accountancy
	(C) Cost Investigation
	(D) Cost Accounting
	(ii) Cost Audit u/s 233-B is to be conducted only when directs such an audit.
	(A) Board of Directors
	(B) Share Holders
	(C) Central Government
	(D) Company Law Tribunal
	(iii) In the initial year Cost Audit was taken merely as a tool for for consumer.
	(A) Price Fixation
	(B) Price Control Mechanism
	(C) Cost Control
	(D) Fair Price of Product

- (iv) \_\_\_\_\_ is to provide for any future decrease in price etc., so that the benefit may be passed on to the contractee.
   (A) Reserve Clause
  - (B) Escalation Clause
  - (B) Escaration Clause
  - (C) Contract Clause
  - (D) Retrospective Clause
- (v) A system of accounting under which separate ledger are maintained for Cost and Financial Accounts is called \_\_\_\_\_\_.
  - (A) Integrated Accounting System
  - (B) Non-Integrated Accounting System
  - (C) Contra Entry System
  - (D) Double Entry System
- (b) State whether the following statements are True or False:

 $1 \times 5 = 5$ 

- (i) The term Administered Price was introduced by Marshall.
- (ii) Out of Pocket Cost are very much relevant in a consideration of Price Fixation during Trade Recession.
- (iii) Contract Costing is often termed as a variant of the Job Costing System.
- (iv) Costing in a Transport Industry consist of determining the Marginal and Standard Cost of vehicle.
- (v) Throughput is the excess of Sales Value over the Total Cost.
- (c) Match Column 'A' with Column 'B':

 $1 \times 5 = 5$ 

Column 'A'		Column 'B'		
1.	Sunk Cost	(A) Discretionary	(A) Discretionary Co.	Discretionary Cost
2.	Managed Cost	(B)	Marginal Cost	
3.	Shut Down Cost	(C)	Historical Cost	
4.	Relevant Cost	(D)	Fixed Cost	
5.	Variable Cost	(E)	Cost for specific situation	

- (d) (i) What types of Health Services are covered under the Companies (Cost Records and Audit) Rule 2014?
  - (ii) Which Rules govern maintenance of Cost Accounting Records and Cost Audit as per Section 148 of the Companies Act, 2013?

    3+2=5

(e) A company possesses two manufacturing plants, each of which can produce three products X, Y and Z from a common raw material. However, the proportions in which the products are produced are different in each plant and so are the plant's operating costs per hour. Data on production per hour and operating cost per hour, together with current orders on hand for each product are given below.

	Product			Operating cost per hour ₹
	X	Y	Z	erd aldroll a co
	(Units)	(Units)	(Units)	ins the overhead
Plant A	2	4	3	9
Plant B	4	3	2	10
Orders on hand	50	24	60	

You are required to formulate the LPP model with the given data. You are *not* to solve the LPP problem.

### SECTION-B

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

Answer any three questions. 17×3=51

2. (a) Ambuja Enterprises is currently working at 50% capacity and produces 10,000 units. At the current operating level, the product costs ₹ 180 per unit and is sold at ₹ 200 per unit.

The cost of ₹ 180 is made up as follows:

	₹
Material	100
Wages	30
Factory overheads	30 (40% Fixed)
Administrative overheads	20 (50% Fixed)

At 60% working, raw material cost increases by 2% and the selling price falls by 2%. At 80% working, raw material cost increases by 5% and the selling price falls by 5%.

Prepare a Marginal Cost Statement showing the estimated profit of the business when it is operated at 60% and 80% capacity.

(b) In a purely competitive market, 10,000 pocket transistors can be manufactured and sold and a certain profit can be generated. It is estimated that 2,000 pocket transistors need to be manufactured and sold in a monopoly market to earn the same profit.

Profit under both the conditions is targetted at ₹ 2,00,000. The variable cost per transistor is ₹ 100 and the total fixed cost is ₹ 37,000.

You are required to find out the unit selling price both under monopoly and competitive situations. 9+(4+4)=17

3. (a) Draw up a Flexible Budget for overhead expenses on the basis of the following data and determine the overhead rates at 70%, 80% and 90%.

Plant Capacity	At 80% Capacity (₹)
Variable Overheads:	
Indirect labour	12,000
Stores, including spares	4,000
Semi Variable Overheads:	
Power (30%-Fixed; 70%-Variable)	20,000
Repairs (60%-Fixed; 40%-Variable)	2,000
Fixed Overheads:	
Depreciation	11,000
Insurance	3,000
Salaries	10,000
<b>Total Overheads</b>	62,000
Estimated Direct Labour Hours	1,24,000

(b) The standard costs of a certain chemical mixture is as follows:

40% Material A at ₹ 200 per ton

60% Material B at ₹ 300 per ton

A standard loss of 10% is expected in production.

During a period, they used—

90 tons of Material A at the cost of ₹ 180 per ton

110 tons of Material B at the cost of ₹ 340 per ton

The output is 182 tons of good production.

Calculate and present Material Yield Variance, Material Mix Variance, Material Usage Variance, Material Price Variance and the Material Cost Variance.

7+10=17

4. (a) The management of MJK Limited considers that product Beta, one of its three main lines, is not as profitable as the other two. The selling prices and costs of these products are as follows:

Product	Selling Price	Direct Material (₹)	Direct Labour		
	(₹)		Dept. X (₹)	Dept. Y (₹)	Dept. Z (₹)
Alfa	50	10	4	2	2
Beta	40	06	2	4	2
Gamma	45	08	2	2	4

Overhead rates for each department per rupee of direct labour are as follows:

	Dept. X (₹)	Dept. Y (₹)	Dept. Z (₹)
Variable Overhead	1.25	0.50	1.00
Fixed Overhead	1.25	2.00	1.50
	2.50	2.50	2.50

As a Cost and Management Accountant advise the MJK Limited about the profitability of Product Beta, Give reasons.

- (b) The successful implementation of a system of budgetary control requires certain pre-requisites.

  Discuss.

  12+5=17
- 5. (a) The following information has been obtained from the records of MJ Limited, a manufacturer of Air-Conditioner:

		(<)
(i)	Materials per machine	1,500
	Wages per machine	900
	Number of machines manufactured and sold	80
	Sale price per machine	4,250

- (ii) Works expenses to be charged at 60% of the wages
- (iii) Office expenses to be charged at 20% of works cost
- (iv) There were no stock of machines or work-in-progress at the beginning or at the end of the period

As a Cost and Management Accountant prepare a statement showing the profit per machine sold. Also prepare a statement showing the actual profit. Works expenses were ₹ 43,000 and office expenses were ₹ 48,000 as per the financial records.

You are also required to reconcile the profit as shown by the costing records with that shown by the financial records.

(b) Mritunjay Limited, manufacturing company, provides you cost and sales figures for the first half and second half of 2015-16 as under:

	First half	Second half
Sales	24,00,000	30,00,000
Total Costs	21,80,000	26,00,000

As a Cost and Management Accountant you have to determine:

- (i) Contribution to Sales Ratio of the Company.
- (ii) Annual Fixed Costs.
- (iii) Break-even Point.
- (iv) Margin of Safety as percentage of sales.

11+6=17

- **6.** (a) What are the other Services that a Cost Auditor of a company can provide to the company in which he is appointed as Cost Auditor?
  - (b) List out Annexures required to be attached along with Form CRA-3 by the Cost Auditors.
  - (c) Is there any obligation on the part of cost auditor to report offence of fraud being or has been committed in the Company by its officers or employees?

    5+8+4=17

#### SECTION-C

(Economics for Managerial Decision Making)

Answer any two questions from the following.

 $12 \times 2 = 24$ 

- 7. (a) How are products priced under Monopoly market?
  - (b) Write about Income Elasticity of demand.

6+6=12

- 8. (a) How is price of a product determined under Perfect Competition?
  - (b) The cost function of a firm is given by  $c = x^3 4x^2 + 7x$ , find at what level of output Average Cost is minimum and what is that Average Cost. 6+6=12
- 9. (a)  $P = \frac{150}{q^2+2} 4$  represents the demand function for a product where 'P' is the price per unit and 'q' is the quantity per unit. You have to determine the marginal revenue function.
  - (b) Discuss briefly the basis on which the open price discrimination is practiced.

6+6=12