

INTERMEDIATE EXAMINATION

June 2016

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 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)

All questions are compulsory.

1. (a) Material cost and factory cost are ₹ 2,38,000 and ₹ 4,30,000 respectively. If the factory overhead is absorbed at 60% of direct labour cost, then find the direct labour cost and factory overhead separately. 2
- (b) If BEP is ₹ 39,00,000 at 65% level of sales and profit is ₹ 8,40,000 at 100% level of sales, find out the P/V ratio. 2
- (c) If the fixed cost per unit is ₹ 40 at 40% level of capacity what should be fixed cost per unit at 80% level of capacity? 2
- (d) 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, find out material usage variance. 2
- (e) The budgeted annual sales of a firm are ₹80 lakhs and 25% of the sales are cash sales. If the average amount of debtors of the firm is ₹ 5 lakhs, what will be the average collection period of credit sales? 2
- (f) Sheena Ltd. is committed to supply 25,000 instruments per annum to Karishma Ltd. on regular basis. It is estimated that inventory holding cost per instrument per month amounts to 20 paise and that set up cost per run of instrument manufacturing is ₹ 330. What should be the optimum run size for instrument manufacturing? 2
- (g) A company has 1,000 units of obsolete items which are carried in inventory at the original purchase price of ₹ 36,000 although their market value as scrap is only ₹ 4,000. If the items are re-worked for ₹ 12,000, they can be sold for ₹ 22,000. Find the relevant cost for selling the items. 2
2. (a) State whether there is any sequence of filing compliance report and cost audit report for a company which is required to file both. 1
- (b) A company is covered under the Companies (Cost Accounting Records) Rules, 2014. But some of its products are not covered under cost audit. Dose the company need to file compliance report? 2
- (c) A person is making internal audit in one of the factories manufacturing 'Washing Powder' in a company. He is proposed for appointment as cost auditor for the same period in another factory manufacturing 'Washing Powder' under the same company. Is the appointment as cost auditor in order? 2
3. Cost function is: $C = \frac{4}{5}x + \frac{16}{5}$, where x is output in units and C is cost in rupees.
Calculate:
- (a) Cost when output is 5 units 2
- (b) Average cost of 15 units 2
- (c) Marginal cost 2

Please Turn Over

SECTION – B
(15×5=75 Marks)

Answer Question no. 4, 5 and 6 and any two from the rest.

4. (a) A radio manufacturer produces x sets per week at total cost of $x^2 + 78x + 2500$. He is a monopolist and demand function for the product is $x = (618 - P)/8$, when price in rupees is P per set. Find the optimal (profit maximizing) production per week. Also find monopoly price per set, total revenue, total cost and total profit at the optimal production. 10
- (b) Total revenue in rupees (R) from sale of x units is given by the equation $R = 90x - 3x^2$. Calculate the point price elasticity of demand, when marginal revenue is ₹ 12. 5
5. (a) What are the disqualifications for appointment as a Cost Auditor? State the duties of Cost Auditor. 5+4
- (b) Answer any two of the following sub-parts: 3×2
- (i) Under what circumstances a company can apply for exemption from application of the Companies (Cost Audit Report) Rules, 2014?
- (ii) What do you understand by Performance Appraisal Report (Form III)?
- (iii) State whether overall annual turnover/individual turnover definition will include other operational income like job work income, scrap sale, trading turnover, export benefits, sales of services etc.
- (iv) State whether maintenance of cost accounting records and cost audit thereof, subject to threshold limits prescribed, are applicable to products which are for 100% captive.
6. (a) What do you understand by transfer pricing? State the objectives of inter-division transfer pricing. 2+4
- (b) Answer any one of the following sub-parts: 4×1
- (i) Find primal from the Dual
Min. $W = 7y_1 + 9y_2 + 14y_3$
Subject to
 $2y_1 + 3y_2 \geq 4$
 $3y_1 + 2y_2 + 5y_3 \geq 5$
 $3y_2 + 4y_3 \geq 7$
And $y_1, y_2, y_3 \geq 0$
- (ii) State the four-fold classification of government's intervention in Indian Economy.
- (c) Answer any one of the following sub-parts: 5×1
- (i) Graphically explain the equilibrium of a firm under perfect competition in the short run.
- (ii) Draw an expansion path through an isoquant map and explain.
7. (a) Vishakha Ltd. commences a business of manufacturing Mobile Sets on 1st April 2015 and asked you to prepare a statement showing profit per mobile sold (charging labour and material at actual cost, works overheads at 100% of labour cost and office overheads at 25% of works cost) and a statement showing the reconciliation between profits as per cost accounts and profits as per Profit and Loss Accounts for the year ended on 31st March, 2016.

Two types of mobiles are manufactured by the company with no-finished or semi-finished stock on 31st march 2016. The relevant particulars are as under:

Mobile types	M	K
Produced and sold in 2015-16 ('000 units)	160	95
Average cost of material per mobile ₹	280	320
Average cost of labour per mobile ₹	480	580
Selling price per mobile ₹	1800	2400

The Works expenses were (₹ '00000) 1680 and office expenses were (₹'00000) 622.

- (b) Narrate the accounting treatment of scrap.

8. Garur Ltd. manufactures several products and it uses a single overhead rate based on direct labour cost. The overheads incurred by the company for the year ending on 31st March 2016:

	₹
Machine operation expenses	20,25,000
Machine maintenance expenses	3,75,000
Salaries of technical staff	12,75,000
Wages and salaries of stores staff	5,25,000

During the period Garur Ltd. introduced activity based costing system and the following activities were identified:

- Stores activity-receiving materials
- Production activity-set up of machines for production run
- Quality inspection

It is determined that:

- The machine operation and machine maintenance expenses should be apportioned between stores and production activity in 3:7 ratios.
- The technical staff salaries should be apportioned between stores activity, production activity and quality inspection in 6:64:30 ratios.

The consumption of activities during the year is as under:

- Direct labour hours worked 40,000
- Direct wages rate ₹ 60 per hour
- Production set-ups 4,992
- Material and component consignments received from suppliers 1,500
- Number of quality inspection carried out 2,500

The data relating to two products manufactured by Garur Ltd. during the year are as under:

Product	P-1	P-2
Direct material costs ₹	45,000	3,200
Direct labour hours	960	100
Direct material consignments received	48	52
Production runs	36	24
Number of quality inspections done	30	10
Quantity produced (units)	12,000	4,000

You are required:

- Calculate the cost of product P-1 and P-2 based on the existing system of single overhead recovery rate.
- Determine the cost of product P-1 and P-2 using activity based costing.

5+10

9. In a factory, following the Job Costing Method, an abstract from the work-in-process, as at 30th September, 2015 were prepared as under:

Job no.	Materials ₹	Direct labour hours	₹	Factory overheads applied ₹
115	1,325	400	800	640
118	810	300	500	400
120	765	250	475	380
	2,900		1,755	1,420

Materials used in October were as follows:

Materials requisition no.	Job no.	Cost ₹
54	118	300
55	118	425
56	118	515
57	120	665
58	121	910
59	124	720
		3,535

A summary of labour hours deployed during October is as under:

Job no.	No. of hours Shop-A	No. of hours Shop-B
115	25	25
118	90	30
120	75	10
121	65	—
124	20	10
	275	75
Indirect labour:		
Waiting for material	20	10
Machine breakdown	10	5
Idle time	5	6
Overtime premium	6	5
	316	101

A shop credit slip was issued in October that the Material issued under Requisition No. 54 is returned to Stores for being unsuitable. A Material Transfer Note was issued in October indicating that the material issued under Requisition No. 55 for Job 118 was directed to Job 124. The hourly rate in Shop-A per labour hour is ₹ 3 while at Shop-B it is ₹ 2 per hour. The factory overhead is applied at the same rate on direct labour as in September.

In October, Jobs 115, 118 and 120 were completed. It is practice of the management to put 10% on the factory cost to cover administration and selling overheads and invoicing the job to the customer on a total cost plus 20% basis. You are asked to compute the factory cost of the completed jobs and their invoice prices.