INTERMEDIATE EXAMINATION

June 2015

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.

This paper contains four questions.

All questions are compulsory, subject to instruction provided against each question.

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.

1. Answer *all* questions:

(a) SHRIJINI LTD. having a Margin of Safety of ₹ 4 lakh makes a Profit of ₹ 80,000. If its Fixed Cost is ₹ 5 lakh, what will be Break-Even Sales of SHRIJINI LTD.? 2

(b) In a factory of ASHLIN LTD., where Standard Costing System is followed, the production department consumed 1100 kgs. of a material @ ₹ 8 per kg. for a Product-A resulting in material price variance of ₹ 2,200 (FAV) and material usage variance of ₹ 1,000 (Adv.). What is the standard material cost of Actual Production of a Product-A? 2

(c) OPTIMA LTD. operates a Throughput Accounting System. The details of Product-Z per unit are as under:

	₹
Selling Price	45
Material Cost	18
Conversion Cost	22
Return per hour for Product-Z	270

What is the time on bottleneck Resources (in minutes)? 2

(d) GYANI Transporter is running 8 buses between two cities which are 90 kilometres apart.
Seating capacity of each bus is 52 passengers but actual capacity is 80%.
Calculate the total passenger kilometres for the month of May 2015. 2

(e) A television company manufactures several components in batches.
The following data relate to one component:

Annual demand	32,000 units
Set up cost/batch	₹ 120
Annual rate of interest	12%
Cost of production per unit	₹ 16

Calculate the Economic Batch Quantity (EBQ). 2

(f) Whether separate form CRA-2 is required to be filed by a company, having 2 or more different types of products covered under Cost Audit? 2

(g) What are the powers of the Cost Auditor under the Companies Act, 2013? 2

(h) What do you mean by the term "Oligopoly"? 2

(i) What is Marginal Revenue Product (MRP)? 2

(j) The Cost of a product of MENZ LTD. is given by function $C(q) = 200q - 10q^2 + \frac{1}{3}q^3$. [Where C(q) stands for Cost function and q for output.]

Calculate, output at which average cost is equal to marginal cost. 2

2. Answer *any two* questions (Carrying 20 Marks each):

(a) **(i)** VIBRANT LTD. a manufacturing Company, produces one main Product A and two by-products M and N.

For the month of May, 2015, following details are available:

Total Cost upto separation point ₹ 2,20,000.

Product/By-Product	A	M	N
Cost after separation		₹ 35,000	₹ 24,000
No. of units produced	4,000	1,800	3,000
Selling price per unit	₹ 100	₹ 40	₹ 30
Estimated net profit as percentage to sales value		20%	30%
Estimated selling expenses as percentage to sales value	20%	15%	15%

There is no beginning or closing inventories.

Required:

Prepare statement showing:

(1) Allocation of joint cost; and

(2) Product wise and overall profitability of the company for May, 2015. 5+5=10

(ii) Normal capacity of SUVAN LTD. is 240000 Units per annum. Cost structure for the year ending 31st March, 2015 is as follows:

Direct material cost per unit		₹ 25
Direct labour cost per unit (subject to a minimum of ₹ 2,50,000 per month)		₹ 20
Overheads:	Fixed	₹ 18,00,000
	Variable per unit	₹ 15

Semi variable ₹ 9,60,000 per year upto 50% capacity and additional ₹ 3,00,000 for every 20% increase in capacity or part thereof.

In the year 2015-16 the company to be worked at 60% capacity for the first four months but it was expected that it would work at 80% capacity for the remaining 8 months. During the first four months, the selling price per unit will be fixed at ₹ 100.

Required:

What should be the price per unit in the remaining eight months to earn a total Profit of ₹ 43,80,000? 4+6=10

(b) (i) SHEENNA LTD., an appliance manufacturer, has always sold its product through wholesalers. Last year its sales were ₹ 20,00,000 and its net profit 10% of sales. As a result of the increase in appliance sales through departmental stores and e-commerce business establishment, the company is considering elimination of wholesalers and selling directly to retailers. It is estimated that this would result in a 40% drop in sales but net profit would be ₹ 1,80,000 due to the elimination of middlemen. Fixed expenses would increase from ₹ 2,00,000 to ₹ 3,00,000 owing to additional storage and logistics facilities.

As a Management Accountant you are required to **find out**:

(1) Wheather the proposed change would raise or lower the break-even point in rupees? By how much? Give reason.

(2) What would be the sale volume in rupees which would enable Sheena Ltd. to obtain as much profit as it made last year? 8+2=10

(ii) ANUKULA UDHYOG LTD. manufactures two types of products X and Y and overheads are absorbed on the basis of direct labour hours. The information about these products for the month of May, 2015 is as follows:

	Product X	Product Y
Production volume	2550 Units	3300 Units
Direct Material cost per unit	₹ 300	₹ 450
Direct Labour cost @ ₹ 60 per hour	₹ 240	₹ 360

During the above said period direct labour hours worked were 30000 hours and production overheads were ₹ 16,87,500. Details of overheads according to identified three activities are as follows:

Activity	Overheads	Cost Driver level	
	₹	X	Y
Order processing	3,65,000	650 orders	350 orders
Machine processing	11,20,000	9500 machine hours	12,900 machine hours
Inspection	2,02,500	275 Inspections	400 Inspections

You are required to calculate the cost of production per unit for each product by using:

(1) Direct Labour Hour Rate for absorption of overhead; and

(2) Activity Based Costing (**ABC**) Method. 3+7=10

(c) (i) ABOKASH LTD., operates a System of Standard Costing. The Company manufactures a Chemical Product by mixing three ingredients Chemical A, B and C and processes the same. The Standard Cost data for the product are as follows:

Chemical	Percentage of total input	Standard Cost per kg. (₹)
A	50%	40
B	30%	60
C	20%	95

Note: Loss during processing is 5% of input and this has no realizable value.

During the month of May, 2015, 10200 kg. of finished product was obtained from the Inputs as per details given below:

Chemical Consumed	Quantity purchased and issued	Actual Cost (₹)
A	5200 kg.	2,34,000
B	3600 kg.	2,19,600
C	1700 kg.	1,58,100

You are required to calculate:

(1) Material Cost Variance
(2) Material Price Variance
(3) Material Mix Variance
(4) Material Yield Variance
(5) Material Usage Variance 2+2+2+2+2=10

(ii) What do you mean by "Flexible Budgeting"? 2

(iii) ADAMAS LTD.; a newly established manufacturing company has an installed capacity to produce 1,00,000 units of a consumer product annually. However its practical capacity is only 90%. The actual capacity utilisation may be substantially lower, as the firm is new to the market and demand is uncertain. The following budget has been prepared for **90%** capacity utilisation:

	Cost per unit ₹
Direct Materials	12
Direct Labour	8
Direct Expense	5
Production Overheads	10 (40% variable)
Administration Overheads	5 (100% fixed)
Selling and Distribution	6 (50% variable)

You are required to prepare Flexible Budgets of a Consumer product at 70% and 80% levels of capacity utilization giving clearly the Variable Cost, Fixed Cost and the Total Costs under various heads at all stated levels. 4+4=8

3. Answer *any two* questions (Carrying 8 Marks each):

(a) (i) What is the procedure for appointment of Cost Auditor under the Companies Act, 2013? 6

(ii) Whether Cost Audit Report has to be prepared plantwise or for the Company as whole? 2

(b) (i) Who can be appointed as a Cost Auditor? 3

(ii) Under what circumstances will the appointment of Cost Auditor for Conducting Cost Audit be made in firm's name?

Who will authenticate such report and how? 3+2=5

(c) (i) What are the Social Objectives of Cost Audit? 5

(ii) What is the meaning of "Turnover" in relation to the Companies (Cost Records and Audit) Rules, 2014? 3

Answer *any three* questions (Carrying 8 Marks each):

(a) (i) What are the exceptions to the "Law of Demand"? 4

(ii) The demand and supply function under perfect competition are

$y = 16 - x^2$ and $y = 2(x^2 + 2)$ respectively.

Find:

(1) The Market Price;

(2) Producer's Surplus. 2+2=4

(b) (i) What are the factors involved in Demand Forecasting? 5

(ii) The cost of a product of KRISHAN LTD. is given by the function $C = 300x - 10x^2 + \frac{1}{3}x^3$.

Where C stands for cost and x for output.

Calculate the output at which Marginal Cost is Minimum. 3

(c) (i) What are the objectives of Fiscal Policy in India? 4

(ii) The total Profit y in rupees of MEDICOS PHARM LTD., a drug company from the manufacture under sale of x drug bottles in given by $y = -\frac{x^2}{400} + 2x - 80$.

Required:

(1) How many drug bottles must the Company sell to achieve the maximum profit?

(2) What is the Profit per drug bottle when this maximum is achieved? 3+1=4

(d) What are the Pricing policies of a firm for introduction stage of a new product? 8