INTERMEDIATE EXAMINATION

June 2014

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.

Question No. 1 *which is compulsory. Attempt all of them.*

Section A has three questions. Attempt **any two** *of them.*

Section B has two questions. Attempt **any one** *of them.*

Section C has three questions. Attempt **any two** *of them.*

Please: (1) Write answers to all parts of a question together.
(2) Open a new page for answer to a new questions.
(3) Attempt the required number of questions only.

Where necessary, suitable assumptions may be made and disclosed by way of a Note.

Working Notes should form part of the answer.

1. Answer *all* questions:

(a) ASHEEKA LTD. has annual turnover of ₹ 200 lakh and an average C/S Ratio of 40%. It makes 10% profit on sales before charging depreciation and interest which amount to ₹ 10 lakh and ₹ 15 lakh respectively. What will be the Fixed Cost of Asheeka Ltd.? 2

(b) In a factory of ZEE LTD., where Standard Costing is followed, the budgeted fixed overheads for a budgeted production of 4800 units is ₹ 24,000. For a certain period actual (FOH) expenditure was ₹ 22,000 resulting in a fixed overhead volume variance of ₹ 3,000 (Adv.)
Calculate the actual production of ZEE LTD. for the period. 2

(c) OPTIMA LTD. is committed to supply 24000 bearings per annum to BKT Ltd. on a steady basis. It is estimated that it costs ₹ 2·40 as inventory holding cost per bearing per annum and that the set-up cost per run of bearing manufacture is ₹ 648. What would be the optimum run (batch) size for hearing manufacture? 2

(d) The total production cost of HORIZON LTD. for making 6000 units is ₹ 35,000 and the total production cost for making 15000 units is ₹ 69,000. Once the production exceeds 10000 units additional fixed costs of ₹ 7,000 are incurred. What will be the full production cost per unit for making 12000 units? 2

(e) What are the limitations of Uniform Costing? 2

(f) The Compliance Report along with Annexures is to be signed by a Cost Accountant. Whether the Cost Accountant is responsible for the preparation of the Annexures? 2

(g) "Turnover" is gross trunover whether includes excise duty or not—Clarify. 2

(h) What is Temporary Monopoly? 3

(i) The cost function of a firm is given by the following equation:

$$C = 300x - 10x^2 + \frac{1}{3}x^3$$

Where C stands for Cost and X for output.
Calculate Output at which marginal cost is minimum.. 3

SECTION A

Answer **any two** *questions (Carrying 20 Marks each) from this Section.*

2. (a) State the problems associated with Throughput Accounting. 3

(b) The share of total production and the cost-based fair price computed separately for each of the four units in industry are as follows:

(Amount in ₹)

Units	A	B	C	D
Share of Production (%)	40	25	20	15
Direct Material	300	360	340	380
Direct Labour	200	240	280	320
Depreciation	600	400	320	200
Other Overheads	600	600	560	480
	1,700	1,600	1,500	1,380
20% Return on Capital Employed	1,260	860	700	460
FAIR PRICE	2,960	2,460	2,200	1,840
Capital Employed per unit				
Net Fixed Assets (₹ per unit)	6,000	4,000	3,200	2,000
Working Capital (₹ per unit)	300	3,000	300	300
Total Capital (₹ per unit)	6,300	4,300	3,500	2,300

Required:

What should be the uniform price fixed for the product of the industry? 5

(c) MAGATRON LTD. produces and sells four products A, B, C and D. Details of the four products and relevant information are given below for week ended March 29, 2014:

Products	A	B	C	D
Output (units)	120	100	80	120
Cost per unit (₹)				
Direct Material	40	50	30	60
Direct Labour	28	21	14	21
Machine-hours (per unit)	4	3	2	3

The four products are similar and are usually produced in production runs of 20 units and sold in batches of 10 units.

The production overheads during the period are as follows:

	₹
Factory works expenses	20,860
Set up costs	10,500
Stores receiving	7,200
Inspection/Quality control	4,200
Material handling and dispatch	9,240

The production overhead is currently absorbed by using a Machine-hour rate and the company wishes to introduce Activity Based Costing (ABC) system and has identified major cost pools for production overheads and their associated cost drivers.

Information in these activity cost pools and their drivers is given below:

Activity Cost Pools	Cost Drivers
Factory Works Expenses	Machine-hours
Set up costs	Number of production runs
Stores receiving	Requisition raised
Inspection/Quality Control	Number of production runs
Material handling & dispatch	Number of orders executed

The number of requisitions-raised on the stores was 20 for each product and number of orders executed was 42, each order being for a batch of 10 of a product.

Requirements:

(i) Total cost of each product assuming the absorption of overhead on Machine-hour basis.

(ii) Total cost of each product assuming the absorption of overhead by using Activity Based Costing.

(iii) Show the differences between (i) and (ii) and Comment. (3+6+2+1)=12

3. (a) AKASH LTD. operates a system of Standard Costing. The company has normal monthly machine-hour capacity of 100 machines working 8 hours per day for 25 working days in the month of April 2014.

(i) The standard time Required to manufacture one unit of products is 4 hours. The Budgeted fixed overhead was ₹ 1,50,000.

(ii) In the month of April 2014, the company actually worked for 24 days for average 750 machine-hours per day.

(iii) The Actual production was 4500 units, and the actual fixed overhead was ₹ 1,60,000.

You are required to compute:

(A) Fixed overhead efficiency variance

(B) Fixed overhead capacity variance

(C) Fixed overhead calender variance

(D) Fixed overhead expenditure variance

(E) Fixed overhead volume variance

(F) Fixed overhead cost variance 1+2×4+1=10

(b) KOOTCHAR LTD. currently at 80% capacity has the following particulars:

	₹
Sales	48,00,000
Direct Materials	15,00,000
Direct Labour	6,00,000
Variable Overheads	3,00,000
Fixed Overheads	19,00,000

An export order has been received that would utilize half (50%) the capacity of the factory. The order cannot be split i.e. it either to be taken in full and executed at 10% below the normal domestic price or reject totally.

The alternative available to the Management of the company are:

(i) Reject the order and continue with domestic sales only (as at present level of sales).

Or,

(ii) Accept the order, split the capacity (100%) between overseas and domestic sales and turn away excess domestic demand.

Or,

(iii) Increase capacity so as to accept the export order and maintain the present domestic sales by—

A. buying an equipment that will increase capacity by 10%. This will result in an increase of ₹ 1,50,000 in fixed costs; and

B. work overtime to meet balance of required capacity. In that case labour will be paid at one and a half ($1\frac{1}{2}$) times the normal wage rate.

You are required to prepare a comparative statement of profitability and suggest the best alternative. 6+2+2=10

4. (a) Division-AY of STATUSLINE LTD. is a profit centre which produces four products M, N, O and P. Each product is sold in the external market also. Data for the products are:

	M	N	O	P
Market price per unit (₹)	300	292	280	260
Variable production cost per unit (₹)	260	200	180	170
Labour hours required per unit (hrs.)	3	4	2	3

Product P can be transferred to Division-BZ, but the maximum quantity that may be required for transfer is 2500 units of P.

The maximum sales in the external market are:

M-2800 Units; N-2500 Units; 0-2300 Units; and P-1600 Units. Division-BZ can purchase the same product at a price of ₹ 250 per unit from outside instead of receiving transfer of product P from division-AY.

Required:

What should be the tranfer price for each unit for 2500 units of P, if the total labour hours available in Division-AY are 20000 hours? 8

(b) ANSTIM TRANSPORT LTD., a transport company has been given a twenty Kilometer long rout to ply a bus. The bus costs the company ₹ 10 lakh. It has been insured at 3% per annum. The annual road tax amounts to ₹ 20,000. Garage rent is ₹ 4,000 per month. Annual repair is estimated to cost ₹ 23,600 and the bus is likely to last for five years.

The salary of the Driver and the Conductor is ₹ 6,000 and ₹ 2,000 per month respectively in addition to 10% of the takings as commission to be shared equally by them. The Manager Salary is ₹ 14,000 per month and stationery will cost ₹ 1,000 per month. Petrol and Oil will cost ₹ 500 per 1000 kilometres. The bus will make three round trips per day carrying on average 40 passengers in each trip.

Assuming 15% profit on takings and that the bus will ply on an average 25 days in a month.

Required:

Prepare Operating Cost statement on a full year basis and also calculate the bus fare to be charged from each passenger per kilometre. 6+2=8

(c) Briefly distinguish between the two Cost Control Techinques "Budgetary Control" and "Standard Costing". 4