INTERMEDIATE EXAMINATION

June 2013

I–P8(CMA)
Syllabus 2008

Cost and Management Accounting

Time Allowed: 3 Hours

Full Marks: 100

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

Question No. 1 *is compulsory. Answer* **any five** *from the rest.*

1. (a) Match the statement in Column I with the appropriate statement in Column II: 1×5=5

Column I	*Column II*
(i) Apportionment of Overheads	(A) Job Evaluation
(ii) Equivalent Production	(B) Reciprocal Method
(iii) Point Ranking Method	(C) Cost Ledger Accounts
(iv) Output Costing	(D) Process Costing
(v) Non Integrated Accounts	(E) Coal Industry

(b) State whether the following statements are 'True' or 'False': 1×5=5

(i) Fixed cost per unit remains constant irrespective of the number of units of output.
(ii) An efficient worker always gets more bonus under Rowan Plan than under 50% Halsey Plan.
(iii) A bin card shows the quantity and value of a stores item.
(iv) Cost Ledger Control Account is maintained in the costing books while General Ledger Adjustment Account is maintained in the financial books.
(v) In LIFO method of valuing inventory, the company has to suffer loss due to accumulation of old stocks and consequent spoilage and obsolescence.

(c) Fill in the blanks suitably: 1×5=5

(i) __________ centre is defined as a business entity's segment by which both revenues are earned and costs are incurred.
(ii) __________ Level of stores inventory is maximum usage multiplied by maximum lead time.
(iii) The most appropriate cost unit for pricing and costing goods transport is __________.
(iv) Where the production is as per the requirements of the customers, __________ is the method of costing used.
(v) Where there are two raw materials A and B, and the total material mix variance is favourable and if A has a favourable mix variance, then B will have a mix variance that is __________.

(d) In the following cases, one of the four given answers is correct. You are required to indicate the correct answer (= 1 mark) and give brief workings (= 1 mark): 2×5=10

(i) T Ltd. uses pre-determined overhead rate of ₹ 15 per labour hour. The actual labour hours are 5750 and the actual overhead cost is ₹ 85,000. There is
(a) ₹ 1,250 over absorption (c) ₹ 1,000 over absorption
(b) ₹ 1,250 under absorption (d) ₹ 1,000 under absorption

(ii) A chemical process has a normal yield of 90%. In a period, 5000 kgs of material were introduced and there was an abnormal loss of 150 kgs. The quantity of good production is
(a) 4850 kgs (c) 4500 kgs
(b) 4650 kgs (d) 4350 kgs

(iii) If break-even sales is 60% of current sales and profit is ₹ 60,000, then the amount of contribution will be
(a) ₹ 1,00,000 (c) ₹ 1,50,000
(b) ₹ 36,000 (d) ₹ 1,86,000

(iv) The following information is given for the next year:
Budgeted Sales = 5,00,000 units
Finished Goods: Closing Stock = 1,50,000 units; Opening Stock = 80,000 units.
Equivalent units of WIP: Closing Stock = 60,000 units; Opening Stock = 50,000 units.

The number of equivalent units produced would be
(a) 5,80,000 units (c) 5,00,000 units
(b) 5,50,000 units (d) 5,75,000 units

(v) A production process has the capacity to produce either 4,000 units of A or 3,500 units of B or 5,000 units of C. Only one product can be made in a production period. The contributions per unit of A, B and C are ₹ 10, 11 and 8 respectively. The opportunity cost of A would be
(a) ₹ 44,000 (c) ₹ 50,000
(b) ₹ 38,500 (d) ₹ 40,000

2. (a) The following are figures relating to a factory for two successive years:

	Year I ₹	Year II ₹
Sales	10,00,000	16,80,000
Marginal Cost of Sales	6,00,000	8,00,000
Contribution	4,00,000	8,80,000

During Year II, the selling price increased by 20% and the company implemented a cost reduction programme very aggressively. You are required to analyse the increase in contribution due to
(i) Increase in selling price
(ii) Increase in sales volume
(iii) Reduction in cost 3+4+3=10

(b) How would you deal with the following in Cost Accounts?
(i) Fringe Benefits;
(ii) Bad Debts. 3+2=5

3. (a) The following information is available in respect of fixed overheads for a production period:

Overheads Cost Variance	₹ 1,400 (Adverse)
Overheads Volume Variance	₹ 1,000 (Adverse)
Budgeted Hours	1200 hours
Budgeted Overheads	₹ 6,000
Actual rate of recovery of Overhead	₹ 8 per hour

You are required to compute the following for the given production period:
(i) Actual Overheads Incurred
(ii) Overhead Expenditure Variance
(iii) Overheads Capacity Variance
(iv) Actual Hours for Actual Production 2+2+3+3=10

(b) What do you mean by a joint product and a by-product? How are they different? 5

4. (a) The following information is given to you from the records of P Ltd. for the year 2013:

Budgeted Sales Value in 2013:	
April	₹ 4,00,000
May	₹ 4,50,000
June	₹ 5,20,000
July	₹ 4,20,000
August	₹ 4,80,000
Contribution to Sales ratio	40%
Fixed Costs	₹ 12,00,000 for the whole year 2013, includes depreciation ₹ 3,00,000 per annum

Other Information:
40% of each month's sales is produced in the month prior to the sale and 60% in the month of sale. 50% of the direct materials required for production is purchased in the month prior to their use in production. The remaining 50% is purchased in the month of production. Labour costs are paid in the month in which they are incurred and constitute 30% of the variable costs. 60% of the variable costs are direct material costs. Suppliers of direct

materials are paid in the month after purchase. The remaining variable costs are variable overhead costs, of which 40% are paid in the month they are incurred and the balance paid in the next month. Fixed costs are incurred at a constant rate per month and paid in the month they are incurred. The expected capital expenditure in June 2013 is ₹ 1,90,000. The sales receipts budgeted are as follows:

May 2013	₹ 4,01,700
June 2013	₹ 4,50,280
July 2013	₹ 4,25,880

The bank balance on 1.5.2013 is expected to be ₹ 40,000.

Prepare a month-wise cash budget for P Ltd. for the period May to July 2013. 10

(b) Explain the treatment of profits on incomplete work in contract accounts. 5

5. (a) A company manufactures a product currently utilizing 80% capacity with a turnover of 32,000 units at a selling price of ₹ 25 per unit. The variable cost of the product is ₹ 17·5 per unit. Fixed cost amounts to ₹ 1,50,000 up to 80% of level of output and there will be an additional cost of a supervisor amounting to ₹ 20,000 beyond that level.

Calculate:

(i) Activity level (%) at break-even point

(ii) Number of units to be sold to earn a net income of 10% of sales

(iii) Activity level (%) to earn a profit of ₹ 1,00,000 10

(b) The product of a manufacturing concern passes through two processes, A and B and then to finished stock. It is ascertained that in each process, normally 5% of the total weight is lost and 10% is scrap from which processes A and B realize ₹ 80 per tonne and ₹ 200 per tonne respectively. The following are the figures relating to the processes:

	Process A	Process B
Materials (tonnes)	1,000	70
Cost of Materials ₹/tonne	125	200
Wages (₹)	28,000	10,000
Manufacturing Expenses (₹)	8,000	5,250
Output (tonnes)	830	780

There was no stock or WIP in any process.

Prepare the Process Cost A/c of Process B assuming no inter-process profit mark-up on transfers to Process B. 5

6. (a) From the following figures, do the reconciliation process to arrive at the net profit or loss as per financial accounts: 10

	Figures(₹)
Net loss as per Costing Records	1,72,400
Works overhead under recovered in Costing	3,120
Administrative overhead recovered in excess in Costing	1,700
Depreciation charged in Financial Records	11,200
Depreciation recovered in Costing	12,500
Interest received not included in Costing	8,000
Obsolescence charged (loss) in Financial Records	5,700
Income Tax provided in Financial Books	40,300
Bank Interest credited in Financial Books	750
Stores Adjustment (credit) in Financial Books	475
Value of Opening Stock in Cost A/cs	52,600
Value of Opening Stock in Financial A/cs	54,000
Value of Closing Stock in Cost A/cs	52,000
Value of Closing Stock in Financial A/cs	49,600
Interest charged in Cost A/cs but not in Financial A/cs	6,000
Preliminary expenses written off in Financial A/cs	800
Provision for Doubtful Debts in Financial A/cs	150

(b) The Production Department of a factory furnishes the following data for the month of May 2013:

Materials used	₹ 54,000
Direct Wages	₹ 45,000
Overheads	₹ 36,000
Labour hours worked	36000
Machine hours	30000

For a certain job executed by the Department during the period, the following data is given:

Materials used	₹ 6,000
Direct Wages	₹ 5,000
Labour hours worked	4000
Machine hours used	2400

Calculate the cost of the job when the overheads are charged using
(i) Direct Material Cost Rate
(ii) Labour Hour Rate
(iii) Machine Hour Rate 5

7. (a) The following is the summary of receipts and issues of material in a factory for May 2013. Prepare the Stores Ledger (only the quantity and rate columns of the Receipts and Issues are required) according to
(i) First In First Out Method;
(ii) Last In First Out Method;
(iii) Compute the Inventory Turnover Ratio under both (i) and (ii). Which method shows a more favourable situation? (For the purpose of this ratio, do not include shortage value in production cost.) 10

Date: May 2013	Transaction
1	Opening Balance 500 units @ ₹ 25 per unit
3	Issue 70 units
4	Issue 100 units
8	Issue 80 units
13	Received from supplier 200 units @ ₹ 24·5 per unit
14	Returned to Stores 15 units @ ₹ 24 per unit
16	Issue 180 units
20	Received from supplier 240 units @ ₹ 24·75 per unit
24	Issue 304 units
25	Received from supplier 320 units @ ₹ 24·5 per unit
26	Issue 112 units
27	Returned to Stores 12 units @ ₹ 24·5 per unit
28	Received from supplier 100 units @ ₹ 25 per unit

There was a shortage of 5 units on the 15th and 8 units on the 27th.

(b) What are the methods of fixing 'Transfer Price' for transfer of a product from one profit centre to another? Mention one demerit of each method. 5

8. Answer *any three* of the following: 5×3=15
(a) What is a principal budget factor? How is it important? List four such factors.
(b) Write a short note on the Activity based Costing System.
(c) Write a short note on 'flexible budget'.
(d) How are normal and abnormal idle time dealt with in Standard Costing in computing idle time variance?
(e) State the appropriate costing method and cost units for each of the following industries:
(i) Textiles; (ii) Canteen; (iii) Medicines; (iv) Paper; (v) Oil Refinery.