

INTERMEDIATE EXAMINATION

December 2013

I-P8(CMA)

Syllabus 2008

Cost & 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 and answer any five from the rest.

1. (a) Match the statement in Column I with appropriate statement in Column II: 1×5=5
- | Column I | Column II |
|------------------------------------|------------------------------------|
| (i) Machine Hour Rate | (A) Control of Inventory |
| (ii) DISC method | (B) Investment Planning |
| (iii) Batch Costing | (C) Time keeping |
| (iv) Capital Expenditure Budgeting | (D) Absorption of factory overhead |
| (v) FSND Analysis | (E) Toy Industry |
- (b) State whether the following statements are TRUE or FALSE: 1×5=5
- (i) Cost Accounting is defined as technique and process of ascertaining costs.
 - (ii) An efficient worker always gets more bonus under Rowan Plan in comparison to Halsey 50% plan.
 - (iii) Marginal cost includes prime cost plus variable overhead.
 - (iv) Master budget is prepared generally for long-term.
 - (v) Average stock level = Average consumption × Average re-order period.
- (c) Fill in the blanks: 1×5=5
- (i) Difference between Sales and BEP is known as _____.
 - (ii) _____ is the value of benefit sacrificed in favour of an alternative course of action.
 - (iii) Cost of abnormal idle time is charged to _____.
 - (iv) Aggregate of indirect material, indirect Labour and indirect expenses is known as _____.
 - (v) WIP appears on the credit side of the contract account when the contract is _____ at end of the accounting period.
- (d) In the following cases, one out of four answers is correct. You are required to indicate the correct answer (= 1 mark) and give workings (= 1 mark): 2×5=10
- (i) Total cost of 2000 units is ₹ 32000 and for 3200 units is ₹ 38,000. Fixed cost will be
 - (a) ₹ 32,000
 - (b) ₹ 22,000
 - (c) ₹ 20,000
 - (d) ₹ 6000

Please Turn Over

- (ii) The BEP is 15,000 units, Fixed Cost is ₹ 22,500, variable cost per units ₹ 45 the P/V ratio will be
- $33\frac{1}{3}\%$
 - 55%
 - 15%
 - 25%
- (iii) The standard and actual data for product 'MNP' are given as under:
Standard 40 hours @ ₹ 20 per hour. Actual 45 hours @ ₹ 22 per hour, so labour efficiency variance is
- ₹ 90 Adverse
 - ₹ 100 Favourable
 - ₹ 90 Favourable
 - ₹ 100 Adverse
- (iv) If the capacity usage ratio of a production department is 90% and activity ratio is 99%, then efficiency ratio is
- 120%
 - 110%
 - 90%
 - 100%
- (v) Monthly demand of a product is 500 units. Set up cost per batch is ₹ 60 cost of manufacturing per unit is ₹ 20 Rate of Interest is 10% p .a. Based on these parameter, the Economic Batch Quantity would be
- 600 units
 - 500 units
 - 1500 units
 - 1000 units

2. (a) Chandu Ltd. is currently working at its 60% capacity and produces 24,000 units. The unit cost and selling price for the same level are as follows:

	Per unit (₹)
Material	120
Labour	90
Factory overhead (80% variable)	60
Administrative overhead (75% fixed)	40
Selling and distribution overhead (50% variable)	30
Total Cost per unit	340
Selling price per unit	500

You are required to prepare a flexible budget and estimate the profit of the company when it works at 80% and 100% capacities. It is believed that at 80% capacity raw material cost increases by 3% and selling price falls by 3% whereas at 100% capacity raw material cost increases by 5% and selling price falls by 10%. 5+5=10

- (b) List out ten functional budgets.

3. (a) State the differences between Differential costing and Marginal costing. 5
- (b) While preparing the estimate of profitability for the coming year, the Sales Manager of a company indicated sale of the single product manufactures at a sale price of ₹ 60 per unit.

At that price the expected profit will be ₹ 25,00,000. The variable cost of the product is ₹ 20 per unit and the total fixed expenses for the year was estimated at ₹ 15,00,000.

The Sales Manager further indicated that if there is a reduction in price, the quantity of sale will rise in the following manner:

	When selling price reduced by	Quantity of sale to increase by
(i)	10%	20%
(ii)	5%	15%
(iii)	2.5%	8%

As a Cost Accountant, you have been asked to evaluate the effect of alternative sale prices as above and suggest the best alternative to be adopted in the coming year: 10

4. (a) Discuss the accounting treatment for spoilage and defectives in Cost Accounting. 5
- (b) A Company produces two products A & B using similar inputs and facilities. The availability of Labour hours in a year is 2,35,000 hours and this is considered as the limiting factor. The following details are available for the two products:

	Product A	Product B
Selling price per unit (₹)	100	50
Direct material per unit (₹)	50	11
Direct Labour ((₹ 5 per hour)	25	20
Estimated sale demand (Nos.)	10,000	50,000

Other variable costs common to both products are:

- (i) variable production overhead ₹ 2 per hour of direct labour.
(ii) Variable selling overhead 10% of sale price.

In the context of the above limiting factor, you are required to calculate a production plan that will maximise contribution to the company and also workout total contribution at that level. 10

5. (a) The following details relating to the product 'X' during the month of March, 2013 are available:
- Standard Cost per unit
Materials 50 kg @ ₹ 40 per kg.
Labour 400 hours @ ₹ 1.00 (one) per hour.
- Actual Cost for the month
Material 4,900 kgs @ ₹ 42 per kg.
Labour 39,600 hours @ ₹ 1.10 per hour.
- Actual Production—100 units

Please Turn Over

You are required to compute:

- (i) Material Price Variance (MPV)
- (ii) Material Usage Variance (MUV)
- (iii) Material Cost Variance (MCV)
- (iv) Labour Rate Variance (LRV)
- (v) Labour Efficiency Variance (LEV)
- (vi) Labour Cost Variance (LCV)

You are also required to reconcile the standard and the actual cost with the help of such variances. 6+4=10

- (b) Define uniform costing. What are the essential requirements to install a uniform costing system? 5
6. (a) In a concern engaged in process industry, four products emerge from a particular process of operation. The total cost of input for the period ended 30.9.2013 is ₹ 2,53,500. The details of output, additional costs after split-off point and the sales value of the products are as under:

Products	Output (kgs.)	Addl. Cost after Split-off point (₹)	Sales value (₹)
A	8,000	60,000	1,68,000
B	5,000	10,000	1,10,000
C	3,000	—	60,000
D	4,000	20,000	90,000

If the products are sold at split-off point, without further processing, the Sales value would have been: (₹)

A	1,15,000
B	90,000
C	55,000
D	80,000

You are required to prepare a statement of profitability based on the products being sold.

- (i) after further processing
 - (ii) at the split-off point. 5+5=10
- (b) Define the terms: Capacity costs and Relevant cost. 2+3=5
7. (a) Bright Engineering Co. Ltd. manufactures two products X & Y in its factory, similar raw material and similar production processes are involved in their production.

The following particulars are given for the year 2012.

	X	Y
No. of units produced	10,000	15,000
No. of orders (total)	30	120
No. of Labour Hours per unit	2	4
Set ups in the year	20	80
Machine hour per unit	6	2

The Co. incurred total over heads of ₹ 11,60,000 during the year. These overheads have been related to Machine activity, set-ups activity and Handling orders activity to the extent of ₹ 9,00,000, ₹ 80,000 and ₹ 1,80,000 respectively.

You are required to calculate the overhead absorption rate for both the products using Traditional Costing method and the Activity Based Costing method. 3+3+4=10

(b) Discuss the accounting treatment of idletime wages and overtime wages in cost accounts. 2+3=5

8. Answer *any three* of the following: 5×3=15

- (a) Inter-process Profits.
 - (b) Cost Ledger (maintained in a Costing Department).
 - (c) Benefits of Integrated Accounting system.
 - (d) Business performance measurement systems.
 - (e) Budget Manual.
-