INTERMEDIATE EXAMINATION

December 2011

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

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

Column I	Column II
(i) Performance of Public Enterprises	(A) Measures Divisional Performance
(ii) Residual Income	(B) Purchase Order Processed
(iii) Cost Driver	(C) Future Costs affected by decision making
(iv) Point Rating	(D) Shows profitability and capacity utilisation
(v) Relevant Cost	(E) Job Evaluation

(b) State whether the following statements are True or False: 1×5
- (i) Incentive systems benefit only workers.
- (ii) Service departments do not render services to each other.
- (iii) Contract costing is only a variant of Job costing.
- (iv) Differential costing and Marginal costing mean the same thing.
- (v) Standards are arrived at based on past performance.

(c) Fill-up the blanks suitably: 1×5
- (i) In absorption costing __________ cost is added to inventory.
- (ii) __________ becomes more effective in a firm with the use of standard costing.
- (iii) In 'make or buy' decision, it is profitable to buy from outside only when the supplier's price is below the firm's own __________.
- (iv) A cost which does not involve any cash outflow is called __________.
- (v) __________ costing reduces the possibility of under pricing.

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

(i) XYZ Co. Ltd. is having 400 workers at the beginning of the year and 500 workers at the end of the year. During the year 20 workers were discharged and 15 workers left the company. The Labour Turnover rate under 'separation method' is:

A. 22·20%
B. 7·78%
C. 4·00%
D. 14·40%

(ii) A factory operates a standard cost system, where 2000 kgs of raw materials @ ₹12 per kg were used for a product, resulting in price variance of ₹ 6000 (F) and usage variance of ₹ 3000 (A). Then standard material cost of actual production was

A. ₹ 20,000
B. ₹ 30,000
C. ₹ 25,000
D. ₹ 27,000

(iii) A company maintains a margin of safety of 25% on its current sales and earns a profit of ₹ 30 lakhs per annum. If the company has a p/v ratio of 40%, its current sales amount to

A. ₹ 200 lakhs
B. ₹ 300 lakhs
C. ₹ 325 lakhs
D. None of the above

Please Turn Over

(iv) The annual demand of a certain product is 8000 units, ordering cost per order is ₹ 40, carrying cost is 10% of average inventory value and purchase cost is ₹ 10 per unit. The EOQ for the product is
A. 1200
B. 1000
C. 900
D. 800

(v) Sales for two consequtive months of a company are ₹ 3,80,000 and ₹ 4,20,000. The company's net profits for these months amounted to ₹ 24,000 and ₹ 40,000 respectively. There is no change in P/V ratio or fixed costs. The P/V ratio of the company is
A. $33\frac{1}{3}\%$
B. 40%
C. 25%
D. None of the above

2. (a) A company prepares a budget for a production of 200000 units. Variable cost per unit is ₹ 15 and the fixed cost is ₹ 2 per unit. The company fixes its selling price to fetch a profit of 10% on cost.
(i) What is the break-even point? (both in units and in ₹)
(ii) What is profit volume ratio?
(iii) If it reduces its selling price by 5%, how does the revised selling price affect the break-even point and the profit volume ratio?
(iv) If a profit increase of 10% is desired more than the budget, what should be the sales at the reduced price? 3+2+3+2

(b) State briefly the effect on profitability under marginal costing and absorption costing. 5

3. (a) The following facts are extracted from the books of Alpha Radio Manufacturing Company for the year 2010.
(i) It produces two types of radio—Type A and Type B and sells these in two markets—Kolkata and Siliguri.
(ii) The budgeted and actual sales for the year 2010 are as follows:

	Kolkata	Siliguri
Type A—Budgeted	1000 units at ₹ 200 each	800 units at ₹ 200 each
Actual	900 units at ₹ 200 each	750 units at ₹ 200 each
Type B—Budgeted	800 units at ₹ 300 each	600 units at ₹ 300 each
Actual	1000 units at ₹ 300 each	750 units at ₹ 300 each

Analysis of variance discloses that Type A is overpriced and Type B is underpriced. If the price of A Type radio set is reduced by 10% and price of B Type radio set is increased by 20% and if a modern and extensive advertisement campaign is introduced, then the following volume of sales could be made in the next year as expected by the Marketing Manager.

	Expected increase/decrease over the current budget	Kolkata Market	Siliguri Market
Product A:	Due to change in pricing policy	+20%	+15%
	Due to introduction of modern advertisement campaign	+5%	+3%
Product B:	Due to change in pricing policy	+10%	(–)2%
	Due to introduction of modern advertisement campaign	+5%	+5%

On the basis of above you are required to prepare sales budget for the year 2011. 10

(b) State the difference between Forecast and Budget. 5

4. (a) Distinguish between "Incentives to indirect workers" and "Indirect incentives to direct workers". 5

(b) Both direct and indirect employees of a department in a factory are entitled to production bonus in accordance with a Group Incentive Scheme, the outlines of which are as follows:

(i) For any production in excess of standard rate fixed at 10,000 tonnes per month of 25 days, a general incentive of ₹ 10 per tonne is paid in aggregate. The total amount payable to each separate group is determined on the basis of an assumed percentage of such excess production being contributed by it, namely @70% by direct labour, @10% by inspection staff, @12% by maintenance staff and @ 8% by supervisory staff.

(ii) Moreover, if the excess production is more than 20% above the standard, direct labour also get a special bonus @ ₹ 7 per tonne for all production in excess of 120% of standard.

(iii) Inspection staff are penalised @ ₹ 20 per tonne for rejection by customers in excess of 1% of production (Actual).

(iv) Maintenance staff are penalised @ ₹ 20 per hour of breakdown.

From the following particulars for a month, workout the production bonus by each group:

A. Production 13,000 tonnes (Actual)
B. Rejection by customers—200 tonnes
C. Machine breakdown—50 hours 4+2+2+2

5. (a) Budgets are classified according to Time. State how they are classified. 5

(b) XYZ Ltd. manufactures four products A, B, C and D. Whose data are given below:

	A	B	C	D
Direct Materials (₹)	3,000	6,000	9,000	18,000
Direct Labour (₹)	1,500	3,000	4,500	9,000
Direct Labour Hours	50	100	150	300
Machine Hours	30	15	10	5

You are required to prepare a statement showing the allocation of factory overheads (which amounted to ₹ 1,08,000) using the basis of allocation as under:

(i) Direct Material Cost
(ii) Direct Labour Cost
(iii) Direct Labour Hours
(iv) Machine Hours

Out of these four bases of allocation, which you prefer and why? 2+2+2+2+2

6. (a) Following are the particulars given by the owner of a hotel. You, as a Cost & Management Accountant, are requested to advise him that what rent should he charge from his customers per day so that he is able to earn 25% on cost other than interest: 25% on con

(i) Staff salaries ₹ 80,000 per annum.

(ii) Room attendants salary ₹ 2 per day. The salary is paid on daily basis and services of room attendant are needed only when the room is occupied. There is one room attendant for one room.

(iii) Lighting, heating and power. The normal lighting expenses for a room if it is occupied for the whole month is ₹ 50. Power is used only in winter and normal charge per month if occupied for a room is ₹ 20.

(iv) Repairs to Building—₹ 10,000 per annum
(v) Linen, etc.—₹ 4,800 per annum
(vi) Sundries—₹ 6,600 per annum

9 attended for 1 no

(vii) Interior decoration, etc.—₹ 10,000 per annum

(viii) Cost of Building at ₹ 4,00,000 and its depreciation rate is 5%

(ix) Other equipment at ₹ 1,00,000 and its depreciation rate is 10%

(x) Interest @ 5% may be charged on its investment in the buildings and equipment.

(xi) There are 100 rooms in the Hotel and 80% of the rooms are normally occupied in summer and 30% rooms are busy in winter.

[You may assume that period of summer and winter is six months each. Normal days in a month may be assumed to be 30.] 10

(b) Explain the concept of 'Joint Costs' in joint products and by products. 5

7. (a) M/s. Jupiter & Co. Ltd. manufactures a product in its factory which presently utilises 60% of its capacity. The cost details including selling price are given below:

	₹
Sales 6000 units	5,40,000
Direct Materials	96,000
Direct Labour	1,20,000
Direct Expenses	20,000
Factory Overheads	2,00,000
Administration Overheads	21,000
Selling and Distribution Overheads	25,000

Out of fixed overheads, 12.5% and 20% of selling and distribution overheads variable with production and sales. Administration overheads are wholly fixed.

Now, it is revealed that existing product could not achieve budgeted level for two consecutive years, the management decides to introduce a new product with marginal investment but largely using present plant and machinery.

The cost data of the new product is given below:

	₹
Direct Materials	16 per unit
Direct Labour	15 per unit
Direct Expenses	2 per unit
Variable Factory Overheads	2 per unit
Variable Selling & Distribution Overheads	1·5 per unit

Marketing Manager of the company is expecting to sell 2000 units of new product at a price of ₹ 60 per unit.

The fixed factory overheads are expected to increase by 10% and fixed selling and distribution expenses will go up by ₹ 13,500 annually. Administration overheads will remain unchanged.

You are advised to give your opinion. Should the new product be introduced? 3+3+3+1

(b) Distinguish between Job costing and Process costing. 5

8. Write short notes on *any three* of the following: 5×3

(a) Limitations of market-based transfer pricing;

(b) Inter-Locking Accounts;

(c) Cost-plus Contract;

(d) Principal Budget Factor;

(e) Perpetual Inventory System.