

PTP_Intermediate_Syllabus 2008_Dec2014_Set 1

Paper – 8: Cost & Management Accounting

Time Allowed: 3 Hours

Full Marks: 100

**Question No 1 is Compulsory. Answers any five Questions from the rest.
Working Notes should form part of the answer.**

Question:

1. (a) Match the statement in Column I with appropriate statement in Column II [1x5]

(i) Scatter Diagram	(A) Supervisor's Salaries
(ii) Escalator Clause	(B) Point Rating
(iii) Stepped Cost	(C) Technique to assist interfirm comparison
(iv) Uniform Costing	(D) Splitting of Semi-Variable Costs
(v) Job evaluation	(E) Contract Costing

(b) State whether the following statements are TRUE or FALSE: [1x5]

- (i) Time and Motion study which is a function of the engineering department is useless for the determination of wages.
- (ii) Integral accounts merge financial and cost accounts in one set of accounts.
- (iii) In ZBB important reference is made to previous level of expenditure.
- (iv) A key factor, which at a particular time or over a period will not limit the activities of the organization.
- (v) Profit planning and control is not a part of budgetary control mechanism.

(c) Fill in the blanks: [1x5]

- (i) Two methods used for calculation of equivalent production are and
- (ii) Reorder level is multiplied by
- (iii) Transfer Pricing have significance for the purpose of measurement of performance.
- (iv) A flexible budget recognizes the behavior of and
- (v) Profit volume graph shows the relationship between and

(d) In the following cases, You are required to indicate the correct answer and give workings: [2x5=10]

- (i) If the ordering cost per order is ₹ 20, carrying cost is 10% of average inventory value, purchase cost is ₹ 10 per unit and economic order quantity (EOQ) for the product is 400 units; the expected annual demand for the product will be.....
 - (A) 2,000 units
 - (B) 4,000 units
 - (C) 5,000 units
 - (D) 6,000 units
- (ii) Selling price of a product is ₹ 8 per unit, variable cost is ₹ 5 per unit and fixed cost is ₹ 12,000. B.E point in units will be.....
 - (A) 2,400 units
 - (B) 4,000 units
 - (C) 5,000 units

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(D) None of the above

(iii) The cost per unit of a product manufactured in a factory of ZENION LTD. amounts to ₹160 (75% variable) when production is 10,000 units. If the production increases by 25% what would be the total cost of production per unit?

(A) ₹132

(B) ₹152

(C) ₹160

(D) ₹180

(iv) Time allowed for a job is 45 hours; a worker takes 42 hours to complete the job. Time rate per hour is ₹15. The total earnings of the worker under Halsey Premium Plan will be.....

(A) ₹600.50

(B) ₹612.50

(C) ₹622.50

(D) ₹652.50

(v) The following figures have been given for Profit and Sales from the accounts of ZEESLIN LTD.

Year	Sales (₹)	Profit (₹)
2013	2,00,000	20,000
2014	3,00,000	40,000

To earn a Profit of ₹50,000, sales will be.....

(A) ₹2,60,000

(B) ₹3,00,000

(C) ₹3,50,000

(D) ₹4,00,000

Question:

2. (a) A factory incurred the following expenditure during the year 2014:

	₹
Direct material consumed	12,00,000
Manufacturing Wages	7,00,000
Manufacturing overhead:	
Fixed	3,60,000
Variable	<u>2,50,000</u>
	6,10,000
	<u>25,10,000</u>

In the year 2015, following changes are expected in production and cost of production.

(i) Production will increase due to recruitment of 60% more workers in the factory.

(ii) Overall efficiency will decline by 10% on account of recruitment of new workers.

(iii) There will be an increase of 20% in Fixed overhead and 60% in Variable overhead.

(iv) The cost of direct material will be decreased by 6%.

(v) The company desire to earn a profit of 10% on selling price.

Ascertain the cost of production and selling price.

[6+2]

(b) Relevant data relating to a Company are:

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	Products			
	A	B	C	Total
Production and sales (Units)	60,000	40,000	16,000	
Raw material usage in units	10	10	22	
Raw material costs (₹)	45	40	22	24,76,000
Direct labour hours	2.5	4	2	3,42,000
Machine hours	2.5	2	4	2,94,000
Direct Labour Costs (₹)	16	24	12	
No. of production runs	6	14	40	60
No. of deliveries	18	6	40	64
No. of receipts	60	140	880	1,080
No. of production orders	30	20	50	100

Overheads:	₹
Setup	60,000
Machines	15,20,000
Receiving	8,70,000
Packing	5,00,000
Engineering	7,46,000

The Company operates a JIT inventory policy and receives each component once per production run.

Required:

- (i) Compute the product cost based on direct labour-hour recovery rate of overheads.
- (ii) Compute the product cost using activity based costing. [2+5]

Question:

3. (a) ABC Ltd operates a system of standard costing in respect of one of its products which is manufactured within a single cost centre. The Standard Cost Card of a product is as under:

Standard		Unit cost (₹)
Direct Material	5 kgs @ ₹ 4.20	21.00
Direct Labour	3 hours @ ₹ 3.00	9.00
Factory Overhead	₹ 1.20 per labour hour	3.60
	Total manufacturing Cost	33.60

The production schedule for the month of June, 2014 required completion of 40,000 units. However, 40,960 units were completed during the month without opening and closing work-in-process inventories.

Purchases during the month of June, 2014, 2,25,000 kgs of material at the rate of ₹4.50 per kg. Production and Sales records for the month showed the following actual results. Material used 2,05,600 kgs.

Direct labour 1,21,200 hours; cost incurred	₹3,87,840
Total factory overhead cost incurred	₹1,00,000
Sales	40,000 units
Selling price to be so fixed as to allow a mark-up of 20 per cent on selling price.	

Required:

- (i) Calculate material variances based on consumption of material.
- (ii) Calculate labour variances and the total variance for factory overhead.

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(iii) Prepare Income statement for June, 2014 showing actual gross margin.

(iv) An incentive scheme is in operation in the company whereby employees are paid a bonus of 50% of direct labour hour saved at standard direct labour hour rate. Calculate the Bonus amount. [3+4+3+2=12]

(b) State the treatment of By-product Cost in Cost Accounting, when they are of small total value. [3]

Question

4. (a) State 'Operating Costing' and mention at least five activities where it is applicable. [2+5]

(b) A retail dealer in garments is currently selling 24,000 shirts annually. He supplies the following details for the year ended 31st March 2014.

Selling price per shirt: ₹ 800

Variable cost per shirt: ₹ 600

Fixed Cost:

Staff salaries: ₹24,00,000

General Office Cost: ₹8,00,000

Advertising Cost: ₹8,00,000

As a CMA, you are required to answer the following each part independently:

(i) Calculate Break Even Point and margin of safety in sales revenue and number of shirts sold. [2+2]

(ii) Assume that 28,000 shirts were sold during the year, find out the net profit of the firm. [2]

(iii) Assuming that in the coming year, an additional staff salary of ₹ 8,00,000 is anticipated, and price of shirt is likely to be increased by 15%, what should be the break- even point in number of shirts and sales? [2]

Question

5. (a) Explain Zero-Base Budgeting (ZBB). [5]

(b) Henna Limited uses a small casting in one of its finished products. The castings are purchased from a foundry. Henna Limited purchases 54,000 casting per year at a cost of ₹800 per casting.

The castings are used evenly throughout the year in production process on a 360 day per year basis. The company estimates that it costs ₹9,000 to place a single purchase order and about ₹300 to carry one casting in inventory for a year. The carrying costs result from the need to keep the castings in carefully controlled temperature and humidity conditions, and from the high cost of insurance.

Delivery from the foundry generally takes 6 days, but it can take as much as 10 days. The days of delivery time and percentage of their occurrence are shown in the following table-

Delivery Time (days)	6	7	8	9	10
Percentage of occurrence	75	10	5	5	5

(i) Compute the Economic Order Quantity.

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- (ii) Assume that the company is willing to take a 15% risk of being out of a stock. What would be the safety stock and the Re-Order point?
- (iii) Assume that the company is willing to take a 5% risk of being out of stock. What would be the safety stock and Re-Order point?
- (iv) Refer to the original data. Assume that using process re-engineering the company reduces its cost of placing a purchase of order to only ₹600. In addition, the company estimates that when the waste and in efficiency caused by inventories are considered, the true cost of carrying a unit in stock is ₹720 per year. (a) Compute new EOQ and (b) How frequently would the company be placing an order, as compared to the old purchasing policy? [2+2+2+4=10]

Question

6. (a) A factory has three production departments A, B and C and also two service departments 'X' and 'Y'. The primary distribution of the estimated overheads in the factory has just been completed. These details and the quantum of service rendered by the service departments, to the other departments are given below:

	A	B	C	X	Y
Primary distribution(₹)	2,40,000	2,10,000	2,50,000	1,40,000	96,000
Service rendered by					
Dept 'X'	30%	20%	35%	-	15%
Dept 'Y'	25%	40%	25%	10%	-

Prepare a statement showing the distribution of service dept. overheads to the production departments, by the simultaneous equation method. [5]

- (b) ABC Ltd. is manufacturing three products X, Y and Z. All the products use the same raw material which is scarce and availability to the extent of 61,000 kg. only. The following information is available from records of the company.

Particulars	Product X	Product Y	Product Z
Selling price per unit (₹)	100	140	90
Variable cost per unit (₹)	75	110	65
Raw Material Requirement per unit (Kg.)	5	8	6
Market Demand (Units)	5,000	3,000	4,000
Fixed Costs			₹ 1,50,000

Advice the Company about the most profitable product mix. Compute the amount of profit resulting from such product mix. [2+4]

- (c) What are the essential features of an effective Wage Plan? [4]

Question.

7. (a) A company produces three joint products in one common process. Each product can be separately processed further after split-off point. The estimated data for a particular month are as under

	Product		
	A	B	C
Selling price at split-off point (₹ / litre)	100	120	150
Selling price after further processing (₹ / litre)	200	200	250

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Post separation point cost (₹)	3,50,000	4,50,000	2,00,000
Output in litres	3,500	2,500	2,000

Pre-separation point joint costs are estimated to be ₹ 2,40,000. As per current practice such costs are apportioned to the three products according to production quantity.

You are required to

- (i) Prepare a statement of estimated profit or loss for each product and in total for the month if all three products are processed further; and [4+4]
- (ii) From the profit statement comments how profit could be maximized if one or more products are sold at split-off points. [4]
- (b) List out the essential features of Uniform Costing. [3]

Question

8. Write short notes on any three from the following: [3x5=15]

- (i) Opportunity Cost.
(ii) Cost Plus Contract
(iii) Features of Management Accounting
(iv) Merits and demerits of Taylor's Differential Piece Rate System
(v) Limitations of Inter firm comparison