

PTP_Intermediate_Syllabus 2008_Jun 2015_Set 2

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]

Column I	Column II
(i) Contribution	(A) Management by exception
(ii) Price rate	(B) Job evaluation
(iii) Under Absorbed Overhead	(C) Marginal costing
(iv) Variance analysis	(D) Supplementary rates
(v) Point rating	(E) Method of wage payment

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

- (i) In variable costing, profit fluctuates with sale.
- (ii) Incentive systems benefit only workers.
- (iii) Fixed costs vary with volume rather than time.
- (iv) Idle time variance is always adverse.
- (v) Service departments usually do not render services to each other.

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

- (i) Cost sheet is a document which provides for assembly of the detailed cost of a -----

- (ii) In contract costing, work in progress certified is valued at -----while uncertified work is valued at -----.
- (iii) -----determines the priorities in functional budgets.
- (iv) The technical term for charging of overheads to cost units is known as -----
- (v) Under -----system, there is no need of reconciliation of cost and financial accounts.

(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): [2x5=10]

- (i) The cost-volume-profit relationship of a company is described by the equation $y = ₹ 8,00,000 + 0.60x$, in which x represents sales revenue and y is the total cost at the sales

PTP_Intermediate_Syllabus 2008_Jun 2015_Set 2

volume represented by x. If the company desires to earn a profit of 20% on sales, the required sales will be.

- (A) ₹ 40,00,000
- (B) ₹ 35,50,000
- (C) ₹ 24,00,000
- (D) ₹ 20,00,000

(ii) The hospital is opened for 365 days, but bed occupancy is 25 patients per day in 120 days and 20 beds occupied in another 80 days. Extra beds occupied during the year are 400. The patient-days of the hospital is

- (A) 4,000
- (B) 5,000
- (C) 3,500
- (D) 4,600

(iii) If the capacity usage ratio of a production department is 90% and activity ratio is 99% then the efficiency ratio of the department is %.

- (A) 100
- (B) 120
- (C) 110
- (D) 105

(iv) Horizon Ltd. manufactures product BM for last 5 years. The Company maintains a margin of safety of 37.5% with overall contribution to sales ratio of 40%. If the fixed cost is ₹ 5 lakh, the profit of the company is

- (A) ₹ 24.00 laks
- (B) ₹ 12.50 lakh
- (C) ₹ 3.00 lakh
- (D) None of A, B, C

(v) In a factory where standard costing is followed, 9,600 kg. of material at ₹10.50/kg were actually consumed resulting in a price variance of ₹4,800(A) and usage variance of ₹4,000 (F). The standard cost of actual production is ₹

- (A) 1,00,000
- (B) 96,000
- (C) 1,20,000
- (D) 86,000

Question.2

(a) Compute a comprehensive machine hour rate for a machine in Production department 'A' of a factory from the following details:

Machine :	Cost including installation charges	₹ 20,00,000
	Estimated useful life	10 years
	Estimated salvage value	10%
Working hours:	Number of working days	300
	Number of shifts per day	2
	Effective working hrs per shift	7
	Stoppages for repairs and maintenance etc.	200 hrs

Operating & other costs:

- (i) Wages of two operators (one for each shift) @ ₹ 5,000 p.m.

PTP_Intermediate_Syllabus 2008_Jun 2015_Set 2

- (ii) Salary of supervisor (one for each shift) @ ₹ 7,500. Only one-fifth of the supervisor's time is devoted to this machine
- (iii) Electric Power : 20 units per hour, each unit costing ₹ 3.20
- (iv) Insurance Charges : ₹ 5,000 per annum
- (v) Repairs and Maintenance (estimated) : ₹12,500 p.m
- (vi) Rent, rates & taxes (allocated) : ₹10,000 pa.
- (vii) General lighting etc. (allocated) : ₹750 p.m
- (viii) Other factory overheads (allocated) : ₹1,40,000 p.a [8]

- (b) For a particular item of store, the following information are available:

Re-order level = 1500 units

Normal Consumption per week = 200 units

Re-order period = 3 to 5 weeks

What will be the Maximum Consumption? [2]

- (c) M/s Sun Light Co. Ltd. fixes the interdivisional transfer prices for its products on the basis of cost plus an estimated return on investment in its divisions. The relevant particular of the budget for the Division 'X' for the year 2014-15 is given below:

Particulars	Amount (₹)
Fixed Assets	6,00,000
Current Assets (other than Cash at Bank)	3,00,000
Cash at Bank	1,00,000
Yearly fixed cost for the division	9,00,000
Variable cost per unit	10
Budgeted volume of production per year (in units)	5,00,000
Desired return on Investment	30%

You are required to determine the transfer price for Division 'X'. [5]

Question.3

- (a) State the limitation of Activity Based Costing System. [5]

- (b) The standard process cost card for a processed item is as under:

	₹ per Kg of Finished Product
Direct Materials 2 kgs @ ₹10 per kg	20
Direct Labour 3 hours @ 20 per hour	60
Fixed Overhead	90
Total	170

Budgeted output for the period is 1000 kgs.

Actual Production for a month is as under:

Material	1400 kgs
Labour	1140 kgs
Overheads	1140 kgs

Actual Cost on Actual Production for a month is as under:

Direct Material	2900 kgs	= cost	₹ 32,000
Direct Labour	3300 hours	= cost	₹ 68,000
Fixed Overhead			₹ 88,000

You are required to work out the following variances;

- (i) Materials Price and Usage Variances.

PTP_Intermediate_Syllabus 2008_Jun 2015_Set 2

- (ii) Labour rate and Efficiency Variances; and
(iii) Fixed Overhead Budget Variances.

[2+2+2+2+2=10]

Question.4

- (a) Mira Ltd. is the manufacturers of picture tubes for T.V. The following are the details of their operation during 2014:

Average monthly market demand	2,000 Tubes
Ordering cost	₹ 100 per order
Inventory carrying cost	20% per annum
Cost of tubes	₹ 500 per tube
Normal usage	100 tubes per week
Minimum usage	50 tubes per week
Maximum usage	200 tubes per week
Lead time to supply	6-8 weeks

Compute from the above:

- (i) Economic Order Quantity. If the supplier is willing to supply quarterly 1,500 units at a discount of 5%, is it worth accepting?
(ii) Maximum level of stock
(iii) Minimum level of stock
(iv) Reorder level

[4+2+2+2]

- (b) Discuss the accounting treatment of spoilage and defectives in Cost Accounting. [5]

Question.5

- (a) A company produces 30,000 units of product X and 20,000 units of product Y per annum. The sales value and cost of two products are as follows:

Sales value	₹7,60,000	Factory overheads	₹ 1,90,000
Direct Material	₹1,40,000	Administrative and selling overheads	₹ 1,20,000
Direct Labour	₹1,90,000		

50% of the factory overhead is variable and 50% of the administrative and selling overheads are fixed. The selling price of X is ₹ 12 per unit and ₹ 20 per unit for Y.

The direct material and labour ratio for product X is 2:3 and for Y is 4:5. For both the products, the selling price is 400% of direct labour. The factory overheads are charged in the ratio of direct labour and administrative and selling overheads are recovered at a flat rate of ₹ 2 per unit for X and ₹ 3 per unit for Y.

Due to fall in demand of the above products, the company has a plan to diversify and make product Z using 40% capacity. It has been estimated that for Z direct material and direct labour will be ₹2.50 and ₹3 per unit respectively. Other variable costs will be the same as applicable to the product X. The selling price of product Z is ₹ 14 per unit and production will be 30,000 units.

Assuming 60% capacity is used for manufacture of X and Y, Calculate —

- (i) Present cost and profit;
(ii) Cost and profit after diversification;

Give your recommendations as to whether to diversify or not.

[4+4+2]

- (b) Explain the term 'pre-determined rate of recovery of overheads'. Write the bases which are usually advocated for such pre-determination.

[3+2]

Question.6

- (a) The financial records of Modern Manufacture Ltd. reveal the following for the year ended 31-12-2014:

PTP_Intermediate_Syllabus 2008_Jun 2015_Set 2

		₹ in '000
		₹
Sales (20,000 units)		4,000
Materials		1,600
Wages		800
Factory Overheads		720
Office and Administrative Overheads		416
Selling and Distribution Overheads		288
Finished Goods (1,230 units)		240
Work-in-progress	48	
Labour	32	
Overheads (Factory)	<u>32</u>	112
Goodwill written off		320
Interest on Capital		32

In the Costing records, factory overhead is charged at 100% wages, administration overhead 10% of factory cost and selling and distribution overhead at the rate of ₹ 16 per unit sold.

Prepare a statement reconciling the profit as per cost records with the profit as per financial records of the company. [10]

(b) State the feature of Standard Cost. [5]

Question.7

(a) From the following particulars, prepare the following in the books of PQR Ltd.

- (i) Statement of equivalent production
- (ii) Statement of apportionment of cost.
 - Opening stock as on 1st August; 200 units @ ₹4 per unit
 - Degree of completion: Materials 100%, labour and Overheads 40%
 - Units introduced during, August: 1,050 units
 - Output transferred to the next process: 1,100 units
 - Closing stock : 150 units
 - Degree of completion: Materials 100%, Labour and Overheads 70%
 - Other relevant information regarding the process:
Materials: ₹3,150, Labour, ₹4,500 and Overheads: ₹2,250 [4+4]

(b) The budgeted overheads and cost driver volumes of Chital Ltd. are as follows:

Cost Pool	Budgeted Overheads (₹)	Cost driver	Budgeted Volume
Material procurement	2,90,000	No. of orders	550
Material handling	1,25,000	No. of movements	340
Set-up	2,07,500	No. of set-ups	260
Maintenance	4,85,000	Maintenance hours	4,200
Quality control	88,000	No. of inspection	450
Machinery	3,60,000	No. of M/C hours	12,000

The firm has produced a batch of 2,600 components of AXL-5, its material cost was ₹1,30,000 and labour cost ₹2,45,000.

The usage activities of the said batch are follows:

Material orders	-26	Maintenance hours	-690
Material movements	-18	Inspection	-28
Set-ups	-25	M/C hours	-1,800

Required:

PTP_Intermediate_Syllabus 2008_Jun 2015_Set 2

- (i) Calculate cost driver rates that are used for tracing appropriate amount of overheads to the said batch; and
- (ii) Ascertain the cost of batch of components using activity based costing. [3+4]

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

- (a) Cost driver
- (b) Job evaluation
- (c) Uniform Costing
- (d) Zero-Base Budgeting
- (e) Concept of split off point and joint cost