[GROUP - II]

## COST AND MANAGEMENT ACCOUNTING

#### BASIC ASPECTS OF COST ACCOUNTING

#### **Objectives - Type Questions:**

Q1. State whether the following statements are True (T) or False (F):

The relationship of value, function and cost can be expressed as Cost = Value/Function.

[Ref:Q1. (b)(iv), June '07 / Paper-8] 1

#### **Descriptive & Practical Questions:**

Q1. State the distinguishing features of standard cost. [Ref: Q5. (a), Dec '07 / Paper-8] 5

## **MATERIALS**

#### **Objectives - Type Questions:**

Q1. State whether the following statements are True (T) or False (F):
ABC analysis is made on the basis of unit prices of materials.

[Ref:Q1. (b)(iii), June '09 / Paper-8] 1

Q2. Choose the correct answer from the brackets:

The annual demand of a certain component bought from the market is 1,000 units. The cost of placing an order is Rs. 60 and the carrying cost per unit is Rs. 3 p.a. The Economic Order Quantity for the item is \_\_\_\_\_\_ . (200, 400, 600)

[Ref: Q1. (c)(i), June '09 / Paper-8] 1

O3. Choose the correct answer from the brackets:

In a company there were 1200 employees on the rolls at the beginning of a year and 1180 at the end, during the year 120 persons left and 96 replacements were made, the rate of labour turnover according to flux method is \_\_\_\_\_\_ . (5.04, 4.03, 9.08)

[Ref:Q1. (c)(iv), June '09 / Paper-8] 1

#### **Descriptive & Practical Questions:**

Q1. Write short note on JIT.

[Ref: Q8. (a), Dec'08 / Paper-8] 3

## **LABOUR**

#### **Objective - Type Questions:**

Q1. State whether the following statements are True (T) or False (F):

Time and motion study which is a function of the engineering department is useless for determination of wages. [Ref:Q1. (c)(ii), Dec. '08 / Paper-8] 1

Q2. Choose the correct answer from the brackets:

In a company there were 1200 employees on the rolls at the beginning of a year and 1180 at the end. During the year 120 persons left service and 96 replacements were made. The labour turnover according to flux method is \_\_\_\_\_\_\_\_\_ %. (5.04, 4.03, 9.08)

[Ref: Q1. (e)(i), Dec. '08 / Paper-8] 1

Q3. State whether the following statements are True (T) or False (F):

Time and motion study which is a function of the engineering department is useles for

determination of wages. [Ref:Q1. (b)(ii), June'09 / Paper-8] 1

Q4. Choose the correct answer from the brackets:

In a company there were 1200 employees on the rolls at the beginning of a year and 1180 at the end, during the year 120 persons left and 96 replacements were made, the rate of labour turnover according to flux method is  $\_\_\_\_$ . (5.04, 4.03, 9.08)

[Ref: Q1. (c)(iv), June '09 / Paper-8] 1

Q5. In the following cases, choose the correct answer:

A worker has time rate of Rs. 15/hr. He makes 720 units of a component (standard time: 5 minutes/ unit in a week of 48 hours). His total wages including Rowan bonus for the week is

A: Rs. 792;

B: Rs. 820;

C: Rs. 840;

D: Rs. 864.

[Ref: Q1. (e)(v), June '09 / Paper-8] 1

#### **Descriptive & Practical Questions:**

- Q1. What is idle time? Explain the causes for idle time. [Ref: Q2. (a), Dec'08 / Paper-8] 5
- Q2. A worker is allowed 60 hours to complete a job on a guaranteed wage of Rs. 10 per hour. He completes the job in 48 hours. For the saving in time, how much he will get under Halsey Premium Plan (@ 50% Bonus)? [Ref: Q2. (b), Dec'08 / Paper-8] 5

Q3. Discuss the essentials of a good incentive scheme.

[Ref: Q2. (a), June '09 / Paper-8] 5

Q4. The standard hours for job X is 100 hours. The job has been completed by Amar in 60 hours, Akbar in 70 hours and Anthony in 95 hours. The bonus system applicable to the job is as follows:

Percentage of time saved to time allowed	Bonus
Saving up to 10%	10% of time saved
From 11% to 20%	15% of time saved
From 21% to 40%	20% of time saved
From 41% to 100%	25% of time saved

The rate of pay is Rs. 10 per hour. Calculate the total earnings of each worker and also the rate of earnings per hour. [Ref: Q2. (b), June '09 / Paper-8] 5

## DIRECT EXPENSES

#### **Objective - Type Questions:**

Q1. If an expenses can be identified with a specific cost unit, it is treated as direct expenses.

[Ref: Q1. (c)(i), Dec. '08 / Paper-8] 1

Q2. If an expenses can be identified with a specific cost unit, it is treated as direct expenses.

[Ref:Q1. (b)(i), June '09 / Paper-8] 1

Q3. The monthly cost of maintenance of machinery for 12,000 machine hours run is Rs. 1,70,000 and for 18,500 hours it is Rs. 2,02,500. The cost of maintenance for 14,000 hours is Rs. \_ (1,90,000, 1,80,000, 1,85,000) [Ref:Q1.(c)(ii), June '09 / Paper-8] 1

## **INDIRECT EXPENSES**

## **Objective - Type Questions:**

Q1. Fill in the blanks:

The term used to charge overheads to cost units is called \_\_\_\_\_

[Ref:Q1.(b)(i), Dec. '08 / Paper-8] 1

#### **Descriptive & Practical Questions:**

Q1. A company makes components for television sets using two service departments and two production departments. The inter-departmental relationship and overhead costs are given below:

	Pe	Percentage of service provided to			
	Maintenance Scheduling Moulding Assembl				
From:					
Maintenance	_	10%	40%	50%	
Scheduling	20%	_	50%	30%	
Total overhead cost (Rs.)	7,50,000	4,00,000	3,78,000	2,76,00	

You are required to show the amount of Scheduling Department costs and Maintenance Department costs to be allocated to the Production Department, using Simultaneous Equation Method.

[Ref: Q2. (c), Dec'08 / Paper-8] 5

Q2. A company has three production departments, A, B and C and two service departments, P and Q. The following figures are available from the primary distribution summary.

Department	Dept. A	Dept. B	Dept. C	Dept. P	Dept. Q
From primary distribution (Rs.)	3,150	3,700	1,400	2,250	1,000

The expenses of the services departments are to be apportioned on a percentage basis as follows:

Department	Dept. A	Dept. B	Dept. C	Dept. P	Dept. Q
P(%)	40	30	20	_	10
Q(%)	30	30	20	20	_

Prepare secondary summary as per the simultaneous equations method.

[Ref: Q2. (c), June '09 / Paper-8] 5

## JOB, BATCH, CONTRACT AND PROCESS COSTING

#### **Objective - Type Questions:**

Q1. Choose the correct answer from the brackets:

The output of three different products P, Q and R in a factory are 20000 Kg, 15000 Kg. and 15000 Kg. respectively. If the costs are in proportion 4:6:7, then the cost per equivalent product unit is Rs. \_\_\_\_\_\_ . (10, 7, 5) [Ref:Q1. (c)(v), June '09 / Paper-8] 1

- Q2. Identify the correct answer from the given alternatives of the following questions:
  - (i) "Conversion cost" refers to
    - A. Manufacturing costs incurred to produce units of output
    - B. All costs associated with manufacturing other than direct labour costs
    - C. The sum of direct material costs and all factory overhead costs
    - D. The sum of raw material costs and overheads costs

[Ref: Q1. (d)(ii), Dec'08 / Paper-8] 1

Q3. Choose the correct answer from the brackets:

The output of three different products P, Q and R in a factory are  $20000 \, \text{kg}$ ,  $15000 \, \text{kg}$  and  $15000 \, \text{kg}$  respectively. If costs are in proportion 4:6:7, then the cost per equivalent unit is Rs. \_\_\_\_\_\_ . (10,7,5) [Ref:Q1.(e)(v),Dec'08/Paper-8] 1

#### **Descriptive & Practical Questions:**

Q1. The following was the expenditure on a contract for Rs. 12,00,000 commenced in January 2008 :

	Rs.
Materials	2,40,000
Wages	3,28,000
Plant	40,000
Overheads	17,200

Cash received on account of the contract up to 31st December was Rs. 4,80,000 being 80% of the work certified. The value of materials in hand was Rs. 20,000. The plant had undergone 20% depreciation.

Prepare contract account.

[Ref: Q3. (a), Dec'08 / Paper-8] 5

Q2. A factory has two production processes. Normal loss in each process is 10% and scrapped units sell for Re. 0.50 each from process 1 and Rs. 3 each from process 2. Relevant information for costing purposes relating to period 5 are as follows:

Direct materials added:	Process 1	Process 2
Units	2,000	1,250
Cost	Rs. 8,100	Rs. 1,900
Direct labour	Rs. 4,000	Rs. 10,000
Production overhead	150% of direct labour cost	120% of direct labour cost
Output to Process 2/finished goods	1,750 units	2,800 units

Actual production overhead Rs. 17,800

Workout cost per unit of output and losses.

[Ref: Q3. (b), Dec'08 / Paper-8] 10

- Q3. State the fundamental principles of Process Costing. [Ref: Q3. (a), June '09 / Paper-8] 5
- Q4. Prabhu Builders Ltd. commenced work on 1st April, 2007 on a contract of which the agreed price was Rs. 5 lakhs. The following expenditure was incurred during the year up to 31st March, 2008.

Particulars	Amount Rs.
Wages	1,40,000
Plant	35,000
Materials	1,05,000
Head office expenses	12,500

Materials costing Rs. 10,000 proved unsuitable and were sold for Rs. 11,500 and a part of plant was scrapped and sold for Rs. 1,700. Of the contract price Rs. 2,40,000 representing 80% of work certified had been received by 31st March, 2008 and on that date the value of the plant on the job was Rs. 8,000 and the value of materials was Rs. 3,000. The cost of work done but not certified was Rs. 25,000.

It was decided to (a) Estimate what further expenditure would be incurred in completing the contract, (b) Compute from the estimate and the expenditure already incurred, the total profit that would be made on the contract and (c) Ascertain the amount of profit to be taken to the credit of Profit and Loss Account for the year ending on 31st March, 2008. While taking profit to the credit of Profit and Loss A/c. that portion of the total profit should be taken which the

value of work certified bears to the contract price. Details of the estimates to complete the contact are given below :

- (a) That the contract would be completed by 30th September, 2008.
- (b) The wages to complete would amount Rs. 84,750.
- (c) That materials in addition to those in stock on 31st March, 2008 would cost Rs. 50,000.
- (d) The further Rs. 15,000 would have to be spent on plant and the residual value of the plant on 30th September, 2008 would be Rs. 6,000.
- (e) The head office expenses to the contract would be at the same annual rate as in 2007-08.
- (f) That claims, temporary maintenance and contigencies would require Rs. 9,000.

Prepare contract account for the year ended 31st March, 2008 and show your calculations of the sum to be credited to Profit and Loss A/c. for the year.

[Ref: Q3. (b), June '09 / Paper-8] 10

## **JOINT PRODUCT & BY PRODUCT**

#### **Descriptive & Practical Questions:**

Q1. Concept of split-off point and joint cost.

[Ref: Q8. (e)(i), June '09 / Paper-8] 3

# RECONCILIATION BETWEEN COST AND FINANCIAL PROFIT AND LOSS ACCOUNT

#### **Descriptive & Practical Questions:**

Q1. As of 31st March, 2008, the following balances existed in a firm's cost ledger, which is maintaind separately on a double entry basis :

	Debit	Credit
	Rs.	Rs.
Stores Ledger Control A/c	3,00,000	_
Work-in-progress Control A/c	1,50,000	_
Finished Goods Control A/c	2,50,000	_
Manufacturing Overhead Control A/c	_	15,000
Cost Ledger Control A/c	_	6,85,000
Total	7,00,000	7,00,000

During the next quarter, the following items arose:

Finished Product (at cost)	2,25,000
Manufacturing overhead incurred	85,000
Raw material purchased	1,25,000
Factory wages	40,000
Indirect labour	20,000
Cost of sales	1,75,000
Materials issued to production	1,35,000
Sales returned (at cost)	9,000
Materials returned to suppliers	13,000
Manufacturing overhead charged to production	85,000

You are required to prepare the Cost Ledger Control A/c., Stores Ledger Control A/c., Work-in progress Control A/c., Finished Stock Ledger Control A/c., Manufacturing Overhead Control A/c., Wages Control A/c., Cost of Sales A/c and the Trial Balance at the end of the quarter.

[Ref: Q7. (a), June '09 / Paper-8] 10

- Q2. Explain the need for reconciliation of cost and financial accounts. Also state the reasons for difference in profit between the two accounts. [Ref: Q7. (b), June '09 / Paper-8] 5
- Q3. Write short note on Profit Centre. [Ref: Q8. (c), June '09 / Paper-8] 3

## DECISION MAKING TOOLS

Ob	ject	ive -Type Questions :		
Q1.	(i)	in the blanks: Sales minus Break-even sales is called In absorption costing cos		
	(iii)	In Television industry the most appro	priate method of costing is costing.	
			[Ref:Q1. (b), Dec. '08 / Paper-8]	1×3
Q2.		te whether the following statements are Fixed costs vary with volume rather th		
	(ii)	In break-even analysis it is assumed the	at variable fosts fluctuate inversely with time. [Ref: Q1. (b), Dec '08 / Paper-8]	1×2
Q3.	(i)			duct
	(iii)	Which of the following is the correct visheet purposes?  A. Variable cost per unit  B. Marginal cost per unit  C. Production cost per unit  D. Total cost per unit	valuation base for finished goods stock for bala	nce
	(iv)	If the raw material prices are affected valuing stocks will give the lowest grown. A. LIFO B. Replacement cost C. FIFO D. Simple average		s of 1×4

Q4. Choose the correct answer from the brackets:

The variable cost of a product increases by 10% and the management raise the unit selling price by equal amount. The fixed costs remain unchanged. Then BEP of the firm \_\_\_\_\_\_. [Ref:Q1. (e), Dec'08 / Paper-8] 1

Q5. Choose the correct answer from the brackets:

A company's fixed cost amounts Rs. 120 lakhs p.a. and its overall P/V ratio is 0.4. The annual sales of the company should be Rs. \_\_\_\_\_\_ lakhs to have a Margin of Safety of 25%. (400, 500, 600) [Ref: Q1. (c)(iii), June'09 / Paper-8] 1

Q6. Fill in the blanks suitably:

- (i) Margin of safety is \_\_\_\_\_ or \_\_\_\_\_.
- (ii) Profit volume graph shows the relationship between \_\_\_\_\_ and \_\_\_\_\_.

[Ref:Q1.(d), June'09 / Paper-8] 1×2

Q7. In the following cases, choose the correct answer:

A Company maintains a margin of safety of 25% on its current sales and earns a profit of Rs. 30 lakhs per annum. If the company has a profit volume (P/V) ratio of 40%, its current sales amount to

A: Rs. 200 lakhs;

B: Rs. 300 lakhs:

C: Rs. 325 lakhs;

D: None of the above.

[Ref: Q1. (e)(ii), June '09 / Paper-8] 1

#### **Descriptive & Practical Questions:**

Q1. Distinguish between Marginal Costing and Absorption Costing.

[Ref: Q7. (a), Dec'08 / Paper-8] 5

Q2. A company produces 30,000 units of product A and 20,000 units of product B per annum. The sales value and costs of the two products are as follows:

Sales Value: Rs. 7,60,000 Factory Overheads: Rs. 1,90,000

Direct Material: Rs. 1,40,000 Administrative and Selling Overheads: Rs. 1,20,000

Direct Labour: Rs. 1,90,000

50% of the factory overheads are variable and 50% of the administrative and selling overheads are fixed. The selling price of A is Rs. 12 per unit and Rs. 20 per unit for B.

The direct material and labour ratio for product A is 2:3 and for B 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 Rs. 2 per unit for A and Rs. 3 per unit for B.

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

Assuming 60% capacity is used for manufacture of A and B, calculate –

- (i) Present cost and profit;
- (ii) Cost and profit after diversification;
- (iii) Give your recommendations as to whether to diversify or not.

[Ref: Q7. (b), Dec'08 / Paper-8] 10

Q3. Write short note on Benchmarking.

[Ref: Q8. (c), Dec'08 / Paper-8] 3

Q4. New India Engineering Co. Ltd., produces three components A, B and C. The following particulars are provided:

	PRODUCT		
	A Rs.	B Rs.	C Rs.
Per Unit			
Sale Price	60	55	50
Direct Material	20	18	15
Direct Labour	15	14	12
Variable overhead expenditure	13	13	17
Fixed Cost is Rs. 1,00,000 per year.			
Estimated Sales (in No. of Units)	2000	2000	2000

Due to break-down of one of the machines, the capacity is limited to 12,000 machine hours only and this is not sufficient to meet the total sales demand.

You are required to work out

- (a) what will be most profitable product mix that should be produced, and
- (b) the total contribution from the revised product mix.

[Ref: Q4. (a), June '09 / Paper-8] 5+5

- Q5. What are the factors those are taken into account by the Management while considering a Make or Buy decision? [Ref: Q4. (b), June '09 / Paper-8] 5
- Q6. Write short note on Cost Volume Profit Analysis. [Ref: Q8. (a), June '09 / Paper-8] 3
- Q7. Write short note on Essentials of Inter firm comparison. [Ref: Q8. (d), June '09 / Paper-8] 3

## **OPERATING COSTING**

#### **Descriptive & Practical Questions:**

Q1. A hotel has a capacity of 100 single rooms and 20 double rooms. The average occupancy of both single and double rooms is expected to be 80% throughout the year of 365 days. The rent for the double rooms has been fixed at 125% of the rent of the single room. The costs are as under:

Variable costs: Single room Rs. 220 each per day; Double room Rs. 350 each per day.

Fixed costs: Rs. 49,64,000

Calculate the rent chargeable for single and double rooms per day in such a way that the hotel earns a margin of safety of 20% on hire of room. [Ref: Q4. (b), Dec'08 / Paper-8] 10

Q2. Define 'Operating Costing' and mention at least five activities where it is applicable.

[Ref: Q6. (b), June '09 / Paper-8] 5

### **RELEVANT COSTING**

#### **Objective - Type Questions:**

Q1. State whether the following statements are True (T) or False (F): Future costs are not relevant while making managerial decisions.

[Ref:Q1. (c)(iv), Dec'08 / Paper-8] 1

## **BUDGETING**

	Ob	jective	-Type	Questions	:
--	----	---------	-------	-----------	---

Q1.	Fill in the blanks suitably:		
	A flexible budget recognizes the behaviour of _	and	
		[Ref: Q1. (d)(iii), June '09 / Paper-8]	1

#### **Descriptive & Practical Questions:**

Q1. The following are the estimated sales of a company for eight months ending 30. 11.2007

Month	Estimated Sales (Units)
April 2007	12,000
May 2007	13,000
June 2007	9,000
July 2007	8,000
August 2007	10,000
September 2007	12,000
October 2007	14,000
November 2007	12,000

As a matter of policy, the company maintains the closing balance of finished goods and raw materials as follows:

Stock item Closing balance of a month

Finished goods 50% of the estimated sales for the next month

Raw materials Estimated consumption for the next month

Every unit of production requires 2 kg of raw material costing Rs. 5 per kg.

Prepare Prodcution Budget (in units) and Raw Material Purchase Budget (in units and cost) of the company for the half year ending 30 September 2007. [Ref: Q6. (a), Dec'08 / Paper-8] 10

Q2. Write short note on Flexible Budgeting.

[Ref: Q8. (e), Dec'08 / Paper-8] 3

Q3. The following information relates to the production activities of Good Wish Ltd. for 3 months ending on 31st December, 2006 :

Particulars	Amount in Rupees
Fixed Expenses :	
Management Salaries	2,10,000
Rent and Taxes	1,40,000
Depreciation of Machinery	1,75,000
Sundry Office Expenses	2,22,000
Total Fixed Expenses	7,47,000
Semi-Variable Expenses at 50% capacity	
Plant Maintenance	62,500
Labour	2,47,000
Salesmen's salaries	72,500
Sundry Expenses	65,000
Total Semi-Variable Expenses	4,47,000
Variable Expenses at 50% capacity	
Materials	6,00,000
Labour	6,40,000
Salesmen's commission	95,000
Total Variable Expenses	13,35,000

It is further noted that semi-variable expenses remain constant between 40% and 70% capacity, increase by 10% of the above figures between 70% and 85% capacity and increase by 15% of the above fig. between 85% and 100% capacity. Fixed expenses remain constant whatever the level of activity. Sales at 60% capacity are Rs. 25,50,000, at 80% capacity Rs. 34,00,000 and at 100% capacity Rs. 42,50,000. All items produced are sold. Prepare a flexible budget at 60%, 80% and 100% productive capacity. [Ref: Q6. (a), June '09 / Paper-8] 10

## STANDARD COSTING

Ob	jective -Type Questions :	
Q1.	Fill in the blanks :  Material usage variance is the sum of	
		[Ref: Q1. (b)(iii), Dec'08 / Paper-8] 1
Q2.	Choose the correct answer from the brackets:  The factory where standard costing is followed, 40 actually consumed resulting in a price variance of R (F). The standard cost of actual production is Rs	s. 4800 (A) and usage variance of Rs. 4000
Q3.	If the capacity usage ratio of a prodcution departmen efficiency ratio of the department is %.	at is 90% and acitivity ratio is 99%, then the [120, 110, 90] [Ref: Q1. (e), Dec '08 / Paper-8] 1
Q4.	Standard hour is the standard time required per uni	t of production. [Ref:Q1. (b)(v), June '09 / Paper-8] 1
Q5.	Fill in the blanks suitably:  (i) Material usage variance is the sum of	
Q6.	In the following cases, choose the correct answer: In a factory of PEE Ltd. where standard costing is fol budgeted production of 4800 units is Rs. 24,000. For a was Rs. 22,000 resulting in a fixed overhead volume production for the period was A: 5400 units; B: 4200 units; C: 3000 units; D: None of the above.	certain period actual expenditure incurred
Des	scriptive & Practical Questions :	
O1.	State the distinguishing features of standard cost.	[Ref: O5. (a), Dec'08 / Paper-8] 5

Q2. The following information was obtained from the records of a manufacturing unit using standard costing system:

Particulars	Standards	Actual	
Production	4000 units	3800 units	
Working days	20	21	
Fixed overheads	Rs. 40,000	Rs. 39,000	
Variable overheads	Rs. 12,000	Rs. 12,000	

#### Calculate:

- (a) Variable overhead variance;
- (b) Fixed overhead expenditure variance;
- (c) Fixed overhead volume variance;
- (d) Fixed overhead efficiency variance;
- (e) Fixed overhead calandar variance.

[Ref: Q5. (b), Dec'08 / Paper-8] 10

Q3. The standard process cost card for a processed item is as under:

		Rs. Per kg of Finished Product
Direct Material — 2 kgs @ Rs. 10 per kg		20
Direct Labour — 3 hours @ Rs. 20 per hour		60
Fixed Overhead		<u>90</u>
•	Total	170

Budgeted output for the period is 1000 kgs.

Actual production and cost data for a month are as under:

Actual production (on equivalent production basis)

Material =	1400 kgs
Labour =	1140 kgs
Overheads =	1140 kgs

Direct Material	2900 kgs	= cost	Rs.	32,000
Direct Labour	3300 kgs	= cost	Rs.	68,000
Fixed Overhead	3300 kgs		Rs.	88,000

You are required to work out the following variances:

[Ref: Q5. (a), June '09 / Paper-8] 10

Q4. Distinguish between Standard Costing and Budgetary Control.

[Ref: Q5. (b), June '09 / Paper-8] 5