

[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 $\text{Cost} = \text{Value}/\text{Function}$.
[Ref: Q1. (b)(iv), June '07 / Paper-8] 1
- Q2. Two broad methods of costing are _____ and _____.
[Ref: Q1. (d)(iii), June '10 / Paper-8] 1
- Q3. State whether the following statements are True (T) or False (F) :
Value analysis helps in cost control. [Ref: Q1. (b)(iii), Dec. '09 / Paper-8] 1
- Q4. Fill in the blanks suitably :
Work study consists of _____ and _____. [Ref: Q1. (d)(i), Dec. '09 / Paper-8] 1
- Q5. Which of the following statements are 'True' or 'False'?
Just-in-time deals with controlling defects in time. [Ref: Q1. (b)(ii), June '10 / Paper-8] 1
- Q6. Fill up the blanks suitably :
A cost which does not involve any cash outflow is called _____ or _____.
[Ref: Q1. (d)(i), June '10 / Paper-8] 1
- Q7. Which of the following statements are 'True' or 'False'?
(i) Cost Accounting is a branch of Financial Accounting.
(ii) The relationship of value, function and cost can be represented as $\text{Cost} = \text{Value}/\text{Function}$.
[Ref: Q1. (b)(i)(iii), Dec. '10 / Paper-8] 1+1
- Q8. A cost which does not involve any cash outflow is called _____ or _____.
[Ref: Q1. (d)(i), June '10 / Paper-8] 1

Descriptive & Practical Questions :

- Q1. State the distinguishing features of standard cost. [Ref: Q5. (a), Dec '07 / Paper-8] 5
- Q2. Distinguish between Cost control and Cost reduction. [Ref: Q5. (a), Dec. '09 / Paper-8] 5
- Q3. The following cost data pertaining to the year 2010-11 have been collected from the books of ABC Power Co. Ltd. prepare a cost sheet indicating the cost of generation of power per unit of KWH. Total unit generated are 15,00,000.

	Rs.
Operating Labour	16,500
Plant Supervision	5,250
Lubricant & Supplies	10,500
Repairs & Maintenance	21,000
Capital Cost	1,50,000
Administrative Overhead	9,000

Coal consumed per KWH 1.5 lbs. and cost of coal delivered to the Power Station is Rs. 33.06 per metric tonne. Depreciation rate chargeable is 4% per annum and interest on capital is to be taken at 7%. [Ref: Q3. (b), June '11 / Paper-8] 8

Q4. **Write short note** : Cost Control and Cost Reduction. [Ref: Q8. (c), June '11 / Paper-8] 3

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
- Q3. State whether the following statements are True (T) or False (F) :
ABC analysis is made on the basis of unit prices of material. [Ref: Q1. (b)(i), Dec '09 / Paper-8] 1
- Q4. In the following cases one out of four answers is correct. You are required to indicate the correct answer (1 mark) and give your reason for answer (1 mark) :
Annual demand 32,000 units; Set up cost/batch Rs. 120. Annual rate of interest 12%; Cost of production per unit Rs. 16.
The Economic Batch Quantity (EBQ) is
(A) 2500 (B) 4000 (C) 3000 (D) 2000 [Ref: Q1. (c)(i), Dec '09 / Paper-8] 2
- Q5. Fill in the blanks suitably :
Economic Batch Quantity depends on _____ and _____ costs. [Ref: Q1. (d),(iii), Dec '09 / Paper-8] 1
- Q6. Choose the correct answer from the following :
(i) A firm requires annually 16,000 nos. of a certain components which it buys at Rs. 60 each. The cost of placing an order is Rs. 120 and the annual storing charges work out 10% of the cost of component. To get maximum benefit the firm should place order for how many units at a time?
(1) 1,000 units;
(2) 900 units;
(3) 800 units. [Ref: Q1. (e)(i), June '10 / Paper-8] 1

- (ii) The valuation of Closing Stock according to Last in First Out method of pricing is done at
- (1) The latest prices;
 - (2) The earliest prices;
 - (3) At average prices;
 - (4) None of the above.
- [Ref: Q1. (e)(v), June '10 / Paper-8] 1

Q7. Fill up the blank suitably :

Economic batch quantity depends on _____ and _____ costs.

[Ref: Q1. (c)(ii), Dec '10 / Paper-8] 1

Q8. Which of the following statements are 'True' or 'False'?

Obsolete stocks can be determined by the frequency of issues.

[Ref: Q1. (b)(v), Dec '10 / Paper-8] 1

Q9. In the following cases one out of four answers is correct. You are required to indicate the correct answer (1 mark) and give your reason for answer (1 mark) :

- (i) If the minimum stock level and average stock level of a particular raw material are 4,000 and 9,000 units respectively, find out its reorder level.

- (1) 9,000 units;
- (2) 10,000 units;
- (3) 4,000 units;
- (4) 5,000 units.

[Ref: Q1. (d)(i), Dec '10 / Paper-8] 2

Q10. State whether the following statements are true or false :

ABC analysis is based on the unit price of materials. [Ref: Q1. (b)(iv), June '11 / Paper-8] 1

Q11. Fill up the blanks suitably :

Re-order Level is _____ usage multiplied by _____ lead time.

[Ref: Q1. (c)(i), June '11 / Paper-8] 1

Q12. In the following cases, one out of four answers is correct. You are required to indicate the correct answer and give brief workings :

- (i) A company uses material A for production of Product Z. The supplier of Material A quotes a delivery period of 2 to 3 weeks. If the company uses 500 to 800 units of Material A per week according to activity levels, the Re-order Level of Material A will be

- (A) 1,000 units
- (B) 1,500 units
- (C) 2,400 units
- (D) None of the above.

[Ref: Q1. (d)(i), June '11 / Paper-8] 2

Descriptive & Practical Questions :

- Q1. Write short note on JIT. [Ref: Q8. (a), Dec '08 / Paper-8] 3
- Q2. Distinguish between Scrap, Spoilage and Defectives in an engineering industry. [Ref: Q2. (a), Dec '09 / Paper-8] 5
- Q3. Write short notes on :
Perpetual Inventory System. [Ref: Q8. (e), Dec '09 / Paper-8] 3
- Q4. Write a note on ABC system of Stores Control. [Ref: Q2. (a), June '10 / Paper-8] ?
- Q5. Write a note on JIT. [Ref: Q8. (f), June '10 / Paper-8] ?
- Q6. Write short notes on :
(i) Treatment of scrap in cost accounts
(ii) VED Analysis
(iii) Supply-chain Analysis [Ref: Q8. (a)(d)(e), Dec '10 / Paper-8] 3×3
- Q7. Distinguish between Job evaluation and Merit rating. [Ref: Q2. (a), June '11 / Paper-8] 5
- Q8. Write short notes on : FSND Analysis. [Ref: Q8. (e), June '11 / 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 useless 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
- Q6. Fill up the blanks suitably :
(i) For designing a labour incentive scheme, the study of _____ and _____ is essential.
(ii) Normal idle time cost should be charged to _____ .
[Ref: Q1. (c)(i)(v), Dec. '10 / Paper-8] 1+1
- Q7. Fill up the blanks suitably :
The Flux rate method of labour turnover considers employees _____ and employees _____ .
[Ref: Q1. (c)(iii), June '11 / 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

- Q5. In a factory bonus system, bonus hours are credited to the employees in the proportion of time taken, which time saved bears to time allowed. Jobs are carried forward from one week to another. No overtime is worked and payment is made in full for all units worked on, including those subsequently rejected. From the following information you are required to calculate for each employee :
- The bonus hours and amount of bonus earned;
 - The total wage costs; and
 - The wages cost of each good unit produced.

Particulars	Worker A	Worker B	Worker C
Basic rate per hour	Rs. 10	Rs. 16	Rs. 12
Units produced	2600	2200	3600
Time allowed for 100 units	2 hours 30 minutes	3 hours	1 hour 30 minutes
Time taken	52 hours	75 hours	48 hours
Rejects	100 units	40 units	400 units

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

- Q6. Briefly state the various causes of Labour Turnover. [Ref: Q3. (a), Dec. '09 / Paper-8] 5
- Q7. Write short notes on :
- Job Evaluation
 - Supply Chain Analysis
- [Ref: Q8. (d)(a), Dec. '09 / Paper-8] 3+3

Q8. The employees in a factory are paid wages at the rate of Rs. 7 per hour for an eight-hour shift. Each employee produces 5 units per hour. The overhead is Rs. 10 per direct labour hour. Employees and the management are considering the following piece rate wage proposal :

Upto 45 units per day of 8 hours	Rs. 1.30 per unit
From 46 units to 50 units	Rs. 1.60 per unit
From 51 units to 55 units	Rs. 1.65 per unit
From 56 units to 60 units	Rs. 1.70 per unit
Abote 60 units	Rs. 1.75 per unit

The working hours are restricted to 8 hours per day. Overhead rate does not change with increased production.

Prepare a statement indicating advantages to employees as well as to management of production levels of 40, 45, 55 and 60 units. [Ref: Q2. (b), June '10 / Paper-8] ?

Q9. What are the avoidable and unavoidable causes of Labour Turn-over?

[Ref: Q4. (a), Dec. '10 / Paper-8] 5

Q10. A company manufactures a standard component. The details of current operations of the company are as follows :

Number of workers employed	100
Weekly working hours	48
Average number of hours lost due to idle time per employee per week	8
Standard time required per unit	2 hours
Hourly wage rate	Rs. 15
Current level of efficiency	80%

For every unit sold the company is getting a cash profit of Rs. 120 before charging labour cost. In view of the increased demand for the product, the company has come to an agreement with the labour union to raise the wage rate by Rs. 3 per hour in return for the workers reducing the idle time by 4 hours and raising the operational efficiency to 90%.

Calculate the

(i) Net Profit at current operations;

(ii) Net Profit after the agreement; and

(iii) Increase/decrease in Net Profit.

[Ref: Q4. (b), Dec. '10 / Paper-8] 4+4+2

Q11. Write short note on— Labour turnover.

[Ref: Q8. (b), Dec. '10 / Paper-8] 3

Q12. The management of Zenith Co. Ltd. are worried about their increasing labour turnover in their factory and before analysing the causes, they want to have an idea of the profit foregone as a result of labour turnover in the last year.

Last year, sales amounted to Rs. 83,03,300 and the P/V ratio was 1/5. The total number of actual hours worked by the direct labour force was 4.45 lakhs. As a result of delays by personnel department in filling up the vacancies due to labour turnover, 60,000 potentially productive hours were not worked. The actual direct labour hours included 30,000 hours attributable to training new recruits, out of which half of the hours were unproductive. The costs consequent on labour turnover revealed on analysis the following :

	Rs.
Settlement costs due to leaving	43,250
Recruitment costs	34,520
Selection and placement costs	42,610
Training costs	<u>69,270</u>
Total	<u>1,89,650</u>

Assuming that the potential production lost as a consequence of labour turnover could have been sold at the prevailing prices, find out the profit foregone last year as a result of labour turnover.

[Ref: Q2. (b), June '11 / Paper-8] 10

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

Descriptive & Practical Questions :

- Q1. The production department of a factory furnishes the following information for the month of March 2007 :
- | | |
|----------------------------|--------------|
| Materials used | — Rs. 54,000 |
| Direct wages | — Rs. 45,000 |
| Overheads | — Rs. 36,000 |
| Labour hours worked | — 36,000 |
| Hours of machine operation | — 30,000 |
- For an order executed by the department during a particular period, the relevant information was as under :
- | | |
|----------------------|---------------|
| Materials used | — Rs.6,00,000 |
| Direct wages | — Rs.3,20,000 |
| Labour hours worked | — 3,200 |
| Machine hours worked | — 2,400 |
- Calculate the overhead charges chargeable to the job by the following methods :
- (i) Direct material cost percentage rate;
 - (ii) Labour hour rate; and
 - (iii) Machine hour rate.
- [Ref: Q2. (c), Dec '09 / Paper-8] 5

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

Q2. State whether the following statements are True (T) or False (F) :

Cost of tube used for packing tooth paste is indirect material cost.

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

Q3. The repairs and maintenance of machinery in factory is a semi variable cost having some relationship with no. of machine hours run. It was Rs. 17,500 during October 2009 for 7,500 machine hours worked and Rs. 15,400 for November 2009 when only 5,400 machine hours were worked. The budgeted cost of repairs and maintenance for December 2009 when 6,200 machine hours are expected to be worked will be

(A) 17,200 (B) 16,800 (C) 16,200 (D) None of these

[Ref: Q1. (c)(iii), Dec. '09 / Paper-8] 2

Q4. State whether the following statements are 'True' or 'False' :

Cost of tube used for packing tooth paste is indirect material cost.

[Ref: Q1. (c)(ii), June '10 / Paper-8] 1

Q5. Choose the correct answer from the following :

The allotment of whole item of cost to a cost centre or cost unit is called as—

- (1) Cost allocation;
- (2) Cost apportionment;
- (3) Overhead absorption;
- (4) Cost classification.

[Ref: Q1. (e)(iii), June '10 / Paper-8] 1

Q6. State whether the following statements are 'True' or 'False' :

Cost of floppy disk used for office computer is administration overhead.

[Ref: Q1. (b)(ii), June '11 / Paper-8] 1

Q7. Monthly cost of maintenance of machinery in a company for 12,000 machine hours run is Rs. 1,70,000 and for 18,500 hours it is Rs. 3,02,500. Cost of maintenance for 14,000 hours will be—

- (A) Rs. 1,90,000
- (B) Rs. 1,80,000
- (C) Rs. 1,85,000
- (D) None of the above

[Ref: Q1. (d)(ii), June '11 / Paper-8] 2

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 :

	Percentage of service provided to			
	Maintenance	Scheduling	Moulding	Assembly
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

- Q3. The budgeted working conditions for a cost centre are as follows :

Normal working per week	42 hours
Number of machines	14
Normal weekly los of hours on maintenance	5 hours per machine
Number of weeks works per year	48
Estimated annual overheads	Rs. 1,24,320
Overhead incurred	Rs. 10,200
Machine hours produced	2,000

On the basis of the above information you are required to calculate :

- (i) The machine hour rate.
- (ii) The amount of under- or over-absorption of overhead.

[Ref: Q5. (b), Dec. '10 / Paper-8] 8+2

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 kg, 15000 kg and 15000 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

Q4. Which of the following statements are 'True' or 'False'?

Just-in-time deals with controlling defects in time. [Ref: Q1. (b)(ii), June '10 / Paper-8] 1

Q5. State whether the following statements are True (T) or False (F) :

- (i) In process costing no distinction is made between direct and indirect material.
- (ii) Coal industry makes use of process costing. [Ref: Q1. (b),(iv)(v), Dec '09 / Paper-8] 1+1

Q6. Fill in the blanks suitably :

- (i) Two methods used for calculation of equivalent production are _____ and _____. [Ref: Q1. (d),(ii), Dec '09 / Paper-8] 1

- (ii) Two broad methods of costing are _____ and _____. [Ref: Q1. (d),(iii), June '10 / Paper-8] 1

Q7. State whether the following statements are true or false :

No distinction is made between direct and indirect materials in process costing.

[Ref: Q1. (b),(iii), June '11 / Paper-8] 1

Q8. Fill up the blanks suitably :

_____ arises when the actual process loss is less than the normal predetermined process loss.

[Ref: Q1. (c),(iv), June '11 / 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 :	<u>Process 1</u>	<u>Process 2</u>
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 contract are given below :

- That the contract would be completed by 30th September, 2008.
- The wages to complete would amount Rs. 84,750.
- That materials in addition to those in stock on 31st March, 2008 would cost Rs. 50,000.
- 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.
- The head office expenses to the contract would be at the same annual rate as in 2007-08.
- That claims, temporary maintenance and contingencies 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

- Q5. From the following particulars, prepare the following in the books of X Ltd. :
- Statement of equivalent production.
 - Statement of apportionment of cost.
- Opening stock as on 1st August : 200 units @ Rs. 4 per unit
 - Degree of completion : Materials 100%, Labour and Overhead 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 : Rs. 3,150, Labou : Rs. 4,500 and Overheads : Rs. 2,250

[Ref: Q3. (b), Dec. '09 / Paper-8] 5

- Q6. What are the equivalent units of production? State two principal methods of calculating equivalent units. [Ref: Q5. (a), Dec. '10 / Paper-8] 3+2
- Q7. What do you understand by Batch Costing? This type of costing is used in poroducing what type of goods. [Ref: Q7. (a), Dec. '10 / Paper-8] 3+2

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

- Q2. ABC Ltd. produces three joint products X, Y and Z. The products are processed further. Pre separation costs are apportioned on the basis of weight of output of each joint product. The following data are provided for month just concluded :

	Rs. 10,000		
Cost incurred upto separation point			
Output (in Litre)	100	70	80
	Rs.	Rs.	Rs.
Costs incurred after separation point	2,000	1,200	800
Selling Price per Litre			
After further processing	50	80	60
At pre separation point (estimated)	25	70	45

You are required to :

- Prepare a statement showing profit or loss made by each product using the present method of apportionment of pre-separation cost, and
- Advise the management whether, on purely financial consideration, the three products are to be processed further. [Ref: Q4. (b), Dec '09 / Paper-8] 5+5

- Q3. Write short note on : Split-off point in joint-products and by products; [Ref: Q8. (c), Dec. '10 / Paper-8] 3

- Q4. A firm manufactures three joint products A, B, C and a by-product X by processing a common stock of material, which cost Rs. 8 per kg. The details of output, market price and the initial processing cost for an input of 10,000 kg. of raw material is as follows :

Product	Output/kg.	Current Market Price/kg. Rs.	Initial Processing Cost
A	5,000	18	Direct labour 1,000 hours @ Rs. 20 Variable overheads : 80% of direct labour Fixed overheads : Rs. 21,000
B	2,500	20	
C	1,500	24	
X	500	4	

The company apportions common cost among joint products on physical units basis.

All the by-products can be further processed and sold at a higher market price, with some sales promotion efforts. The estimated processing cost, marketing cost and the final selling price are given below :

Product	Further Processing Cost per kg. — Rs.	Further Marketing Cost per kg. — Rs.	Final price per kg. — Rs.
A	4	2	28
B	5	2	26
C	6	2	34
X	2	1	6

You are required to compute :

- Cost of joint products at the point of separation after initial processing. (ii) Profit or loss if the products are sold without further processing.
- Which of the products have to be processed further for maximizing profits? Show working.

[Ref: Q2. (a), Dec. '10 / Paper-8] 4+3+3

- Q5. Distinguish between By-Products and Joint Products. [Ref: Q6. (b), June '11 / Paper-8] 5

- Q6. In a factory three products A, B and C are produced from a single process. Each product can be sold at the end of each process or can be further processed independently to produce separate products, which are marketed under different names X, Y, Z respectively.

Details for a period are given below :

Product	Initial Output (units)	Sales Price (Rs.)	Further Processing Cost (Rs.)	Rejection rate
A	5,000	24 per unit	14 per unit	—
B	8,000	10 per unit	6 per unit	—
C	10,000	30 per unit	16 per unit	—
X		44 per unit	—	5%
Y		18 per unit	—	10%
Z		48 per unit	—	8%

Initial total Process Cost Rs. 4 lakhs.

Further processing costs are incurred at the commencement of the second stage of operations. You are required to

- calculate the apportionment of total cost to products A, B and C using sales value,
- state whether further process should be undertaken for each product or not.

[Ref: Q7. (b), June '11 / Paper-8] 4+6

RECONCILIATION BETWEEN COST AND FINANCIAL PROFIT AND LOSS ACCOUNT

Objective -Type Questions :

Q1. Fill in the blanks suitably :

Normal idle time costs should be charged to _____ while that due to abnormal reasons should be charged to _____ . [Ref: Q1. (d)(iv), Dec. '09 / Paper-8] 1

Q2. Contribution earned after reaching Break Even Points is _____ of the firm.

[Ref: Q1. (d)(ii), Dec. '10 / Paper-8] 1

Q3. Which of the following statements are 'True' or 'False'.

Integral accounts merge financial and cost accounts in one set of accounts.

[Ref: Q1. (b)(iv), Dec. '10 / Paper-8] 1

Descriptive & Practical Questions :

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

	Debit Rs.	Credit 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. The Profit & Loss A/c. of XYZ Ltd., for the year ended 31st March 2010 was as follows :

Profit & Loss A/c. for the year ended 31st March 2010

Dr.		Cr.	
Particulars	Amount Rs.	Particulars	Amount Rs.
To Materials	4,80,000	By Sales	9,60,000
To Wages	3,60,000	By Work-in-Progress	
To Direct Expenses	2,40,000	Materials	30,000
To Gross Profit	1,20,000	Wages	18,000
		Direct Expenses	12,000
		By Closing Stock	1,80,000
Total	<u>12,00,000</u>	Total	<u>12,00,000</u>
To Administration Expenses	60,000	By Gross Profit	1,20,000
To Net Profit	66,000	By Dividends Received	6,000
Total	<u>1,26,000</u>	Total	<u>1,26,000</u>

As per the cost records, the direct expenses have been estimated at a cost of Rs. 30 per kg. and administration expenses at Rs. 15 per kg. During the year Production was 6,000 kgs. and Sales were Rs. 9,60,000.

Prepare a statement of costing Profits & Loss A/c. and reconcile the profit with financial profit.

[Ref: Q6. (b), June '10 / Paper-8] 5

Q4. List out the expenses which are of purely financial nature and recorded in Financial Accounts only and not recorded in Cost Accounts. [Ref: Q7. (a), June '11 / Paper-8] 5

MARGINAL COSTING & BREAK EVEN ANALYSIS

Objective -Type Questions :

Q1. In the following cases one out of four answers is correct. You are required to indicate the correct answer (1 mark) and give your reason for answer (1 mark) :

Sales of two consecutive months of a company are Rs. 3,80,000 and Rs. 4,20,000. The company's net profits for these months amounted to Rs. 24,000 and Rs. 40,000 respectively. There is no change in P/V ratio or fixed costs. The P/V ratio of the company is—

(A) 33.33% (B) 40% (C) 25% (D) None of these. [Ref: Q1. (c)(ii), Dec. '09 / Paper-8] 1

Q2. State whether the following statements are 'True' or 'False' :

(i) A key factor, which at a particular time or over a period, will not limit the activities of the organization. [Ref: Q1. (b)(iv), June '10 / Paper-8] 1

(ii) Fixed Cost vary with volume rather than time. [Ref: Q1. (c)(iii), June '10 / Paper-8] 1

(iii) In break-even analysis it is assumed that variable costs fluctuate inversely with time. [Ref: Q1. (c)(v), June '10 / Paper-8] 1

Q3. Fill up the blanks suitably :

(i) Contribution earned after reaching Break Even Point is _____ of the firm.

(ii) Profit-volume graph shows the relationship between _____ and _____. [Ref: Q1. (d)(ii) (v), June '10 / Paper-8] 1+1

Q4. Choose the correct answer from the following :

The scarce factor of production is known as

(1) Linking factor;

(2) Key factor;

(3) Production factor. [Ref: Q1. (e)(ii), June '10 / Paper-8] 1

Q5. Fill up the blanks suitably :

Variable costs go on changing with the _____ level. [Ref: Q1. (c)(iii), Dec. '10 / Paper-8] 1

Q6. In the following cases one out of four answers is correct. You are required to indicate the correct answer (1 mark) and give your reason for answer (1 mark) :

A company has fixed costs of Rs. 6,00,000 per annum. It manufactures a single product which it sells for Rs. 200 per unit. Its contribution to sales ratio is 40%. Its break-even in units is —

(1) 7,500 units

(2) 8,000 units

(3) 3,000 units

(4) 1,500 units [Ref: Q1. (d)(v), Dec. '10 / Paper-8] 1

Q7. State whether the following statements are 'True' or 'False' :

- (i) Marginal costing is useful for long term planning.
- (ii) Opportunity cost is the value of benefit sacrificed in favour of an alternative course of action. [Ref: Q1. (b)(i)(v), June '11 / Paper-8] 1+1

Q8. Fill up the blanks suitably :

_____ cost is the difference in total cost that result from two alternative courses of action. [Ref: Q1. (c)(ii), June '11 / Paper-8] 1

Q9. In the following cases, one out of four answers is correct. You are required to indicate the correct answer and give brief working :

In two consecutive periods, sales and profit were Rs. 1,60,000 and Rs. 8,000 respectively in the first period and Rs. 1,80,000 and Rs. 14,000 respectively during the second period. If there is not change in fixed cost between the two periods, then what would be profit if sales are Rs. 2,00,000?

- (A) Rs. 16,000
- (B) Rs. 18,000
- (C) Rs. 20,000
- (D) Rs. 22,000

[Ref: Q1. (d)(iii), June '11 / Paper-8] 1

Descriptive & Practical Questions :

Q1. Distinguish between Cost control and Cost reduction. [Ref: Q5. (d), Dec. '09 / Paper-8] 5

Q2. A company produces a single product. The selling price of the product is Rs. 69.50 per ton. The variable cost is Rs. 35.50 per ton, fixed cost for the period is Rs. 18.02 lakh.

- (i) Calculate the Break Even Volume; and
- (ii) If the Break Even Volume represents 40% of the capacity of the plant, what will be the profit at 80% capacity if there is a reduction in sale price by 10% for additional 20% production and reduction by 15% for the next additional 20% production?

[Ref: Q5. (c), Dec. '09 / Paper-8] 2+3

Q3. ABC Ltd. has prepared a flexible budget for the coming quarter. The following information is provided from the same :

Production Capacity	40%	60%	90%	100%
Costs	Rs.	Rs.	Rs.	Rs.
Direct Labour	16,000	24,000	32,000	40,000
Direct Material	12,000	18,000	24,000	30,000
Production Overheads	11,400	12,600	13,800	15,000
Administrative Overheads	5,800	6,200	6,600	7,000
Selling and Distribution Overheads	6,200	6,800	7,400	8,000
	<u>51,400</u>	<u>67,600</u>	<u>83,800</u>	<u>1,00,000</u>

However, due to recession the company will have to operate at 50% capacity in the coming quarter. Selling prices has to be lowered to an uneconomic level and expected sales revenue for the coming quarter will be Rs. 49,500. But it is projected that in the next quarter following the coming quarter, the concern will operate at 75% capacity and generate a sales revenue of Rs.90,000.

The Management is considering a suggestion to keep the operation suspended in the coming quarter and restart operation from the quarter when it is expecting to operate at 75% capacity. If the operation is suspended in the next quarter it is estimated that :

- The present fixed cost for the quarter would be reduced to Rs. 11,000.
- There will be cost of Rs. 7,500 for closing down operations.
- There would be additional maintenance cost of Rs. 1,000 for quarter.
- There would be an one time cost of Rs. 4,000 in re opening the plant.

You are required to advise whether the factory should be kept operational during the coming quarter and also what will be the profit at 75% capacity utilization level.

[Ref: Q7. Dec. '09 / Paper-8] 15

- Q4. ABC Ltd. is manufacturing three products X, Y and Z. All the products use the same raw material which is scarce and available 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 (Rs.)	100	140	90
Variable Cost per unit (Rs.)	75	110	65
Raw Material Requirement per unit (Kg.)	5	8	6
Market Demand (Units)	5,000	3,000	4,000
Fixed Costs are Rs. 1,50,000.			

Advise the Company about the most profitable product mix. Compute the amount of profit resulting from such product mix.

[Ref: Q4. (b), June '10 / Paper-8] 5

- Q5. Starlight Co. Ltd. and Jupital Co. Ltd. sell the same type of product. Budgeted Profit & Loss A/c. of these companies for the year ended 31st March 2009 given below :

	Straight Co. (Rs. '000)		Jupiter Co. (Rs. '000)	
Sales		300		300
Less : Variable Cost :				
Material	100		80	
Labour	110		100	
Overhead	<u>30</u>	240	<u>20</u>	200
Fixe Cost		<u>30</u>		<u>70</u>
Budgeted Profit		<u>30</u>		<u>30</u>

You are required to find out the break-even point of each Company. Also state clearly which Company is likely to earn greater profit if there is (i) heavy demand; and (ii) poor demand for its product.

[Ref: Q7. (a), June '10 / Paper-8] 5

Q6. Write short notes on any three of the following :

Managerial Decision Making.

[Ref: Q8. (a) June '10 / Paper-8] 5

Q7. Black & White Co. Ltd. manufactures 10,000 units of a product at a cost of Rs. 4 per unit, which is sold in the domestic market at a sale price of Rs. 4.25 per unit. In the next year (2008), there is a fall in the domestic market which can consume the whole products 10,000) if the sale price is reduced to Rs. 3.72 per unit.

The cost particulars are given below :

	Rs.
Material	1.50 per unit
Wages	1.10 "
Variable overhead	0.60 "
Fixed cost	Rs. 8,000

Marketing Manager has explored the foreign market and it is found that one foreign importer is ready to purchase 20,000 units of the product at a price of Rs. 3.55 per unit. There is a capacity to produce 20,000 units in the factory. However, Rs. 1,600 additional amount will be required towards fixed cost.

You are advised to offer your views whether it is worthwhile to capture the foreign market?

[Ref: Q6. (a) Dec. '10 / Paper-8] 10

Q8. A company has two plants at locations I and II, operating at 100% and 75% of their capacities respectively. The company is considering a proposal to merge the two plants at one location to optimise available capacity. The following details are available in respect of the two plants :

Particulars	Location I	Location II
Sales (Rs. in lakhs)	200	75
Variable Costs (Rs. in lakhs)	140	54
Fixed Costs (Rs. in lakhs)	30	14

For decision-making purposes you are required to work out the following information :

- (i) The capacity at which the merged plant will break even.
- (ii) The profit of the merged plant working at 90% capacity.

[Ref: Q7. (b) Dec. '10 / Paper-8] 5+5

Q9. Write a brief note on Management Accounting.

[Ref: Q4. (a) June '11 / Paper-8] 5

Q10. A company produces a single product which is sold presently in the market at Rs. 75 per unit. The present production and sales are 40,000 units per month representing 50% of the capacity available. The cost data of the product are as under :

	Rs.
Variable Cost per unit	50
Fixed Cost per month	10 lakhs

To utilise the idle capacity and improve profitability, the management has two proposals on hand as under :

- (i) to increase sales by selling to a chain stores 30,000 units at Rs. 55 per unit, retaining existing sales at the existing price.
- (ii) to reduce selling price as advised by the Sales Department as under :

Reduce selling price per unit by	Expected Increase in Sale
Rs. 5	10,000 units
Rs. 8	30,000 units
Rs. 11	35,000 units

Prepare a table to present the result of the above proposals and give your comments.

[Ref: Q4. (b) June '11 / Paper-8] 4+4+2

DECISION MAKING TOOLS

Objective -Type Questions :

Q1. Fill in the blanks :

- (i) Sales minus Break-even sales is called _____ .
- (ii) In absorption costing _____ cost is added to inventory.
- (iii) In Television industry the most appropriate method of costing is _____ costing.

[Ref: Q1. (b), Dec. '08 / Paper-8] 1×3

Q2. State whether the following statements are True (T) or False (F) :

- (i) Fixed costs vary with volume rather than time.
- (ii) In break-even analysis it is assumed that variable costs fluctuate inversely with time.

[Ref: Q1. (b), Dec '08 / Paper-8] 1×2

Q3. Identify the correct answer from the given alternatives of the following questions :

- (i) Which of the following concept is known as cost behaviour-oriented approach to product costing?
- A. Standard costing
B. Marginal costing
C. Process costing
D. Absorption costing
- (ii) Which of the following is true at break-even point?
- A. Total Sales revenue = Variable cost
B. Profit = Fixed cost
C. Sales revenue = Total cost — Variable cost
D. Contribution = Fixed cost

- (iii) Which of the following is the correct valuation base for finished goods stock for balance sheet purposes?
- A. Variable cost per unit
 - B. Marginal cost per unit
 - C. Production cost per unit
 - D. Total cost per unit
- (iv) If the raw material prices are affected by inflation, which of the following methods of valuing stocks will give the lowest gross profit?
- A. LIFO
 - B. Replacement cost
 - C. FIFO
 - D. Simple average
- [Ref: Q1. (d), Dec '08 / Paper-8] 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 _____ .
[increase, decrease, unchanged] [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
- Q8. Which of the following statements are 'True' or 'False'?
A key factor, which at a particular time or over a period, will not limit the activities of the organization.
[Ref: Q1. (b)(iv), June '10 / Paper-8] 1
- Q9. State whether the following statements are 'True' or 'False':
(a) Fixed Cost vary with volume rather than time.

- (b) In break-even analysis it is assumed that variable costs fluctuate inversely with time.
 (c) Future costs are not relevant while making managerial decisions.

[Ref: Q1. (v)(iii)(v)(iv), June '10 / Paper-8] 1+1+1

Q10. Fill up the blanks suitably :

- (a) Contribution earned after reaching Break Even Point is _____ of the firm.
 (b) Profit-volume graph shows the relationship between _____ and _____.

[Ref: Q1. (d)(ii)(v), June '10 / Paper-8] 1+1

Q11. Choose the correct answer from the following :

The scarce factor of production is known as

- (1) Linking factor;
 (2) Key factor;
 (3) Production factor.

[Ref: Q1. (e)(ii), June '10 / 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	B	C
	Rs.	Rs.	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

Q8. A factory is currently working at 50% capacity and produces 5,000 units at a cost of Rs. 90 per unit as per details given below :

Materials	Rs. 50
Labour	Rs. 15
Factory Overhead	Rs. 15 (Rs. 6 fixed)
Administration Overhead	Rs. 10 (Rs. 5 fixed)

The current selling price is Rs. 100 per unit.

At 60% working, material cost per unit increases by 2% and selling price per unit falls by 2%.

At 80% working, material cost per unit increases by 5% and selling price per unit falls by 5%.

Calculate the current profit at 50% working. Estimate profits of the factory at 60% and 80% working. Which capacity of production you recommend?

[Ref: Q3. (b), June '10 / Paper-8] 2+3+3+2

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
- Q3. Starlight Co. Ltd. and Jupiter Co. Ltd. sell the same type of product. Budgeted Profit & Loss A/c. of these companies for the year ended 31st March 2009 given below :

	Starlight Co. (Rs. '000)	Jupitor Co. (Rs. '000)
Sales	300	300
Less: Variable Cost:		
Material	100	80
Labour	110	100
Overhead	<u>30</u>	<u>20</u>
Fixed Cost	<u>30</u>	<u>70</u>
Budgeted Profit	<u>30</u>	<u>30</u>

You are required to find out the break-even point of each Company. Also state clearly which Company is likely to earn greater profit if there is (i) heavy demand; and (ii) poor demand for its product. [Ref: Q7. (a), June '10 / Paper-8] 10

- Q4. Zenith Transport Company has given a route 40 kilometers long to run bus. The bus costs the Company a sum of Rs. 1,00,000. It has been insured at 3% p.a. and the annual tax will amount to Rs. 2,000. Garage rent is Rs. 200 per month. Annual repairs will be Rs. 2,000 and the bus is likely to last for 5 years. The driver's salary will be Rs. 300 per month and the conductor's salary will be Rs. 200 per month in addition to 10% of takings as commission (to be shared by the driver and the conductor equally).

Cost of stationery will be Rs. 100 per month. Manager-cum-accountant's salary is Rs. 700 per month. Petrol and oil will be Rs. 50 per 100 kilometers. The bus will make 3 up and down trips carrying on an average 40 passengers on each trip.

Assuming 15% profit on takings, calculate the bus fare to be charged from each passenger. The bus will run on an average 25 days in a month. [Ref: Q6. (a), June '10 / Paper-8] 8

Q5. In the following cases one out of four answers is correct. You are required to indicate the correct answer (1 mark) and give your reason for answer (1 mark) :

A bus carries 25 passengers daily for 25 days and its mileage per month is 2000 kms. Its passenger kms. per month are—

- (1) 50,000
- (2) 25,000
- (3) 30,000
- (4) 60,000

[Ref: Q1. (d),(iii), Dec '10 / Paper-8] 2

Q6. In the following cases, one out of four answers is correct. You are required to indicate the correct answer and give brief workings :

A 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 is 400. Patient-days of the hospital is—

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

[Ref: Q1. (d),(v), June '11 / Paper-8] 2

Q7. Zenith Transport Company has given a route of 40 kilometers long to run bus. The bus costs the Company a sum of Rs. 1,00,000. It has been insured at 3% p.a. and the annual tax will amount to Rs. 2,000. Garage rent is Rs. 200 per month. Annual repairs will be Rs. 2,000 and the bus is likely to last for 5 years. The driver's salary will be Rs. 300 per month and the conductor's salary will be Rs. 200 per month in addition to 10% of takings as commission (to be shared by the driver and the conductor equally).

Cost of stationery will be Rs. 100 per month. Manager-cum-accountant's salary is Rs. 700 per month Petrol and oil will be Rs. 50 per 100 kilometers. The bus will make 3 up and down trips carrying on an average 40 passengers on each trip.

Assuming 15% profit on takings, calculate the bus fare to be charged from each passenger. The bus will run an average 25 days in a month.

[Ref: Q6. (a), June '10 / 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

Descriptive & Practical Questions :

Q1. What is meant by 'Relevant Cost'? Explain with the help of illustration.

[Ref: Q3. (a), June '10 / Paper-8] 5

BUDGETING

Objective -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

Q2. Which of the following statements are 'True' or 'False'?

(a) In ZBB important reference is made to the previous level of expenditure.

(b) Production Budget is prepared before Sales Budget.

(c) Profit planning and control is not a part of budgetary control mechanism.

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

Q3. In the following cases one out of four answers is correct. You are required to indicate the correct answer (1 mark) and give your reason for answer (1 mark) :

The budgeted annual sales of firm is Rs. 80 lakhs and 25% of the same is cash sales. If the average amount debtors of the firm is Rs. 5 lakhs, the average collection period of credit sales will be months.

(A) $\frac{1}{2}$ (B) 1 (C) $1 + \frac{1}{2}$ (D) None of these

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

Q4. Fill in the blanks suitably :

A flexible budget recognizes the behaviour of _____ and _____ costs.

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

Q5. Which of the following statements are 'True' or 'False'?

(i) In ZBB important reference is made to the previous level of expenditure.

- (ii) Production Budget is prepared before Sales Budget.
 (iii) Profit planning and control is not a part of budgetary control mechanism.

[Ref: Q1. (b)(i)(iii)(iv), June '10 / Paper-8] 1×3

Q6. In the following cases, one out of four answers is correct. You are required to indicate the correct answer and give brief workings :

The budgeted annual sales of a firm is Rs. 80 lakhs and 25% of the same is case sale. If the average amount of debtors of the company is Rs. 5 lakhs, the average collection period of credit sales is —

- (A) 2 months
 (B) 1 month
 (C) 15 days
 (D) None of the above.

[Ref: Q1. (d)(iv), June '11 / Paper-8] 2

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 Production 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

Q4. Write short note on : Performance Budgeting.

[Ref: Q8. (b), Dec. '09 / Paper-8] 3

Q5. Write short notes on :

(i) Zero-Base Budgeting

(ii) Budget Manual

[Ref: Q8. (c)(e), June '10 / Paper-8] 5+5

Q6. From the following forecast of income and expenditure prepare a Cash Budget for the three months ending on June, 2008 :

Month	Sales (Rs.)	Purchase (Rs.)	Wages (Rs.)	Misc. (Rs.)
2008, February	1,20,000	84,000	10,000	7,000
March	1,30,000	1,00,000	12,000	8,000
April	80,000	1,04,000	8,000	6,000
May	1,16,000	1,06,000	10,000	12,000
June	88,000	80,000	8,000	6,000

Additional Information :

- (i) Sales : 20% realised in the month of sales, discount allowed 2%, balance realised equally in two subsequent months.
- (ii) Purchases : These are paid in the month following the month of supply.
- (iii) Wages : 25% paid in arrears following month.
- (iv) Mis. Expenses : Paid a month in arrears.
- (v) Rent : Rs. 1,000 per month paid quarterly in advance due in April.
- (vi) Income Tax : First instalment of advance tax Rs. 25,000 due on or before 15th June to be paid within the month.
- (vii) Income from Investment : Rs. 5,000 received quarterly in April, July etc.
- (viii) Cash in Hand : Rs. 5,000 in April 1, 2008. [Ref: Q3. (a), Dec. '10 / Paper-8] 5+5

Q8. What is Zero Base Budgeting? State briefly its benefits. [Ref: Q3. (b), Dec. '10 / Paper-8] 5

Q9. Draw up a flexible budget for overhead expenses on the basis of the following data and determine the overhead rate at 70%, 80% and 90% plant capacity level :

	At 80% capacity Rs.
Variable overheads :	
Indirect labour	12,000
Indirect material	4,000
Semi-variable overheads :	
Power (30% fixed, 70% variable)	20,000
Repair and maintenance (60% fixed, 40% variable)	2,000
Fixed overhead :	
Depreciation	11,000
Insurance	3,000
Others	<u>10,000</u>
Total overheads	<u>62,000</u>
Estimated direct labour hours	1,24,000

[Ref: Q5. (a), June '11 / Paper-8] 10

- Q10. Write notes on Chargeable Expenses. [Ref: Q5. (b), June '11 / Paper-8] 5
- Q11. Write short notes on ;
- (i) Budgetary Control
 - (ii) Material Purchase Budget
- [Ref: Q8. (b), June '11 / Paper-8] 5+5

STANDARD COSTING

Objective -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, 4600 kg of materials at Rs. 10.50/kg were actually consumed resulting in a price variance of Rs. 4800 (A) and usage variance of Rs. 4000 (F). The standard cost of actual production is Rs. _____. [100000, 96000, 120000]
[Ref: Q1. (e)(iii), Dec '08 / Paper-8] 1
- Q3. If the capacity usage ratio of a production department is 90% and activity ratio is 99%, then the efficiency ratio of the department is _____. [120, 110, 90]
[Ref: Q1. (e), Dec '08 / Paper-8] 1
- Q4. Standard hour is the standard time required per unit 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 _____ and _____ .
 - (ii) Efficiency is basically a ratio of _____ and _____ .
- [Ref: Q1. (d)(ii)(v), June '09 / Paper-8] 1+1
- Q6. In the following cases, choose the correct answer :
In a factory of PEE Ltd. where standard costing is followed, the budgeted fixed overhead for a budgeted production of 4800 units is Rs. 24,000. For a certain period actual expenditure incurred was Rs. 22,000 resulting in a fixed overhead volume variance of Rs. 3,000 (Adv.). Then actual production for the period was
- A : 5400 units;
 - B : 4200 units;
 - C : 3000 units;
 - D : None of the above.
- [Ref: Q1. (e)(iii), June '09 / Paper-8] 1

- Q7. State whether the following statements are 'True' or 'False':
Standard hour is the standard time required per unit of production.
[Ref: Q1. (c)(i), June '10 / Paper-8] 1
- Q8. Fill up the blanks suitably :
Idle time variance is always_____. [Ref: Q1. (d)(iv), June '10 / Paper-8] 1
- Q9. Choose the correct answer from the following :
If actual hours worked exceed the standard hours allowed, the variance which will occur is called as—
(1) Favourable labour efficiency variance;
(2) Adverse labour rate variance;
(3) Adverse labour efficiency variance;
(4) Favourable labour rate variance. [Ref: Q1. (e)(iv), June '10 / Paper-8] 1
- Q10. In the following cases one out of four answers is correct. You are required to indicate the correct answer (1 mark) and give your reason for answer (1 mark) :
The budgeted fixed overhead for a budgeted production of 10,000 units is Rs. 20,000. For a certain period, the actual production was 11,000 units and the actual expenditure came to Rs. 24,000. The volume variance would be
(A) Rs. 4,000 (Adv.)
(B) Rs. 2,000 (Fav.)
(C) Rs. 2,000 (Adv.)
(D) None of these
[Ref: Q1. (c)(v), Dec. '09 / Paper-8] 2
- Q11. A chemical is manufactured by combining two standard items of input A (standard price Rs. 60/kg.) and B (standard price Rs. 45/kg.) in the ratio 60% : 40%. During processing there is a loss of 10% of input. If during a month 1,200 kg. of the chemical is produced incurring a total cost of Rs. 69,600, the total material cost variance will be
(1) Rs. 2,400 (A)
(2) Rs. 2,400 (F)
(3) Rs. 3,000 (A)
(4) Rs. 2,000 (F) [Ref: Q1. (d)(iv), Dec. '10 / Paper-8] 2

Descriptive & Practical Questions :

Q1. State the distinguishing features of standard cost. [Ref: Q5. (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 :

- Variable overhead variance;
- Fixed overhead expenditure variance;
- Fixed overhead volume variance;
- Fixed overhead efficiency variance;
- Fixed overhead calendar 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

Q5. State the principle reasons which give rise to variance between actual and standard in standard costing. [Ref: Q6. (a), Dec. '09 / Paper-8] 5

Q6. The following information are provided to you for a month in respect of a workshop :

- (i) Overhead cost variance — Rs. 1,400 adverse
- (ii) Overhead volume variance — Rs. 1,000 adverse
- (iii) Budgeted hours — 1,200 hrs.
- (iv) Budgeted overhead — Rs. 6,000
- (v) Actual rate of recovery of overhead — Rs. 8 per hour

You are required to compute :

- 1. Overhead expenditure variance
- 2. Actual overheads incurred
- 3. Actual hours for actual production
- 4. Overheads capacity variance
- 5. Overheads efficiency variance
- 6. Standard hours for actual production

[Ref: Q6. (b), Dec. '09 / Paper-8] 10

Q7. B Ltd. started trading on 1st November 2008, manufacturing and selling one product. The standard cost per unit was:

Direct material: Standard price Rs. 10 per kilogram

Standard quantity: 20 kilogram per unit

Direct labour: Standard rate of pay Rs. 5.50 per hour

Standard time allowance: 12 hours per unit

Production overhead costs, all classified as fixed, were budgeted at Rs. 9,00,000 per annum. The standard time for producing one unit is 12 machine hours and normal capacity is 60,000 machine hours per annum. Production overhead is absorbed on machine hours.

For the year ended 31st October 2009, the costs incurred and other relevant information is given below :

Direct material used—	1,00,000 kilograms at a cost of Rs. 10,50,000
Direct wages paid—	Rs. 3,10,000 for 62,000 hours
Production overhead—	Rs. 9,26,000
Machine capacity used—	60,000 hours
Actual output—	4,800 units

Assuming no stocks of work-in-progress or finished goods at year end.

You are required to:

- (a) Show the standard product cost for one unit.
- (b) Calculate variances for material (usage and price), labour (rate and efficiency) and overhead.

[Ref: Q5. June '10 / Paper-8] 5+10

Q8. What are the differences between Labour Rate Variance and Labour Efficiency Variance?

[Ref: Q6. (b), Dec. '10 / Paper-8] 5

UNIFORM COSTING & INTER FIRM COMPARISON**Objective -Type Questions :**

Q1. Fill up the blanks suitably :

_____ is a must for meaningful inter-firm comparison.

[Ref: Q1. (c), (iv) Dec. '10 / Paper-8] 1

Q2. Fill up the blanks suitably :

_____ costing is a must for Inter-firm comparison. [Ref: Q1. (c), (v) June '11 / Paper-8] 1

Descriptive & Practical Questions :

Q1. What is Inter Firm Comparison? Enumerate some of its advantages.

[Ref: Q4. (a), June '10 / Paper-8] 5

Q2. Write shor notes on :

(i) Inter-Firm Comparison

(ii) Uniform Costing

[Ref: Q8. (b), June '10 / Paper-8] 5+5

ACTIVITY BASED COSTING

Descriptive & Practical Questions :

- Q1. Briefly describe what is meant by Activity Based Manager. [Ref: Q4. (a), Dec. '09 / Paper-8] 5
- Q2. Write short note on Cost Driver. [Ref: Q8. (c), Dec. '09 / Paper-8] 3
- Q3. State clearly limitation of Activity Based Costing. [Ref: Q7. (b), June '10 / Paper-8] 5
- Q4. ABC Ltd. is following Activity Based Costing. Budgeted overhead and cost driver volumes are as follows :

Cost Pool	Budgeted/Overheads Rs.	Cost Driver	Budgeted Volume
Material Procurement	11.60 lakhs	No. of orders	2,200
Material handling	5.00 lakhs	No. of movement	1,360
Matintenance	19.40 lakhs	Maintenance hours	16,800
Set-up	80 lakhs	No. of set-ups	1,040
Quality Control	3.52 lakhs	No. of inspection	1,800
Machinery	14.40 lakhs	No. of machine hours	48,000

The company has produced a batch of 5,200 components, its material cost was Rs. 2.60 lakhs and labour cost Rs. 4.90 lakhs. Usage activities of the said batch are as follows :

Material orders—52, Material movements—36, Maintenance hours—1,380, Set-ups—50,
Quality Control Inspection—56 and Machine hours—3,600.

Calculate :

- (i) Cost driver rates that are used for tracing appropriate amount of overheads to the said batch.
- (ii) The cost of batch of component. [Ref: Q6. (a), June '11 / Paper-8] 5+5
- Q5. Write short note on Profit Centre. [Ref: Q8. (a), June '11 / Paper-8] 3

MIXING BAG

Objective -Type Questions :

Q1. Match the statement in Column 1 with the most appropriate statement in Column 2 :

Column 1

1. Uniform Costing
2. Value Analysis
3. Residual Income
4. Stepped Cost
5. Point Rating

Column 2

- A. Job evaluation
- B. Technique to assist inter-firm comparison
- C. Promotes innovation and creativity
- D. Supervisor's salaries
- E. Measures divisional performance

[Ref: Q1. (a), Dec. '09 / Paper-8] 1×5

Q2. Match the following correctly :

- | | |
|--------------------------------|---|
| (i) Scatter Diagram | (A) Production Order |
| (ii) Escalation Clause | (B) Reverse Cost Method |
| (iii) Perpetual Inventory | (C) Splitting of Semi-variable Costs |
| (iv) Material Requisition | (D) Contract Costing |
| (v) By Product Cost Accounting | (E) Method of Maintaining Store Records |

[Ref: Q1. (a), June '10 / Paper-8] 1×5

Q4. Match the following correctly :

Column - I

- (i) Liquidity
- (ii) Value Engineering
- (iii) Angle of Incidence
- (iv) Opportunity Cost
- (v) Value Analysis

Column - II

- (A) Technique of cost reduction
- (B) Current ratio
- (C) Value of benefit lost by choosing alternative course of action
- (D) Indicator of profit earning capacity
- (E) Analysing the role of every part at the design stage

[Ref: Q1. (a), Dec. '10 / Paper-8] 1×5

Q4. Match the statement in Column I with the appropriate statement in Column II :

Column I

- (i) JIT System
- (ii) Output Costing
- (iii) Variance Analysis
- (iv) Differential Costing
- (v) ZBB

Column II

- (A) Decision Making
- (B) Decision Package
- (C) Management by exception
- (D) Coal Industry
- (E) Control of Inventory

[Ref: Q1. (a), June '11 / Paper-8] 1×5