

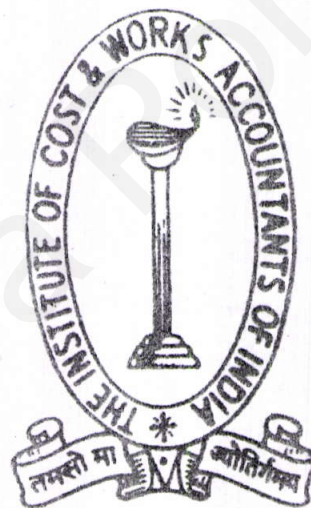
SUGGESTED ANSWERS

INTERMEDIATE EXAMINATION

(SYLLABUS - 2008)

JUNE 2010

GROUP II



THE INSTITUTE OF COST AND WORKS ACCOUNTANTS OF INDIA

12, SUDDER STREET, KOLKATA- 700 016

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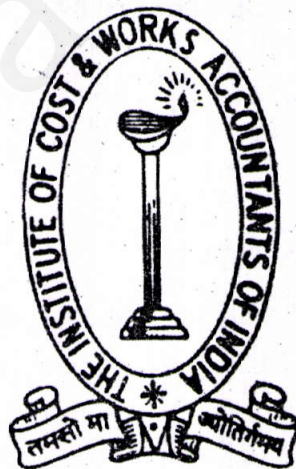
**SUGGESTED ANSWERS
TO
QUESTIONS**

(SYLLABUS - 2008)

**SET AT THE
INTERMEDIATE EXAMINATION**

JUNE 2010

GROUP II



**THE INSTITUTE OF
COST AND WORKS ACCOUNTANTS OF INDIA**

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GUIDELINES TO STUDENTS

- 1. Students are advised to consult Study Notes and Text Books supplemented by the Suggested Answers.**
- 2. Working Notes should be a part of Answers, particularly in Cost & Management Accounting, Operation Management and Information Systems.**
- 3. Assumptions should be logical and clearly stated in the Answers.**

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GROUP -II (JUNE 2010)

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INTERMEDIATE EXAMINATION – GROUP - II
(SYLLABUS - 2008)

SUGGESTED ANSWERS TO QUESTIONS
JUNE - 2010

PAPER – I-P8 : COST & MANAGEMENT ACCOUNTING

Suggested Solution

Question 1. (a) 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 |

Answer to Q.1.(a) :

- | | | |
|-------|---|---|
| (i) | – | C |
| (ii) | – | D |
| (iii) | – | E |
| (iv) | – | A |
| (v) | – | B |

Q.1.(b) Which of the following statements are 'True' or 'False'?

- (i) In ZBB important reference is made to the previous level of expenditure.
- (ii) Just-in-time deals with controlling defects in time.
- (iii) Production Budget is prepared before Sales Budget.
- (iv) A key factor, which at a particular time or over a period, will not limit the activities of the organization.
- (v) Profit planning and control is not a part of budgetary control mechanism.

Answer to Q.1. (b) :

- (i) – False
- (ii) – False
- (iii) – True
- (iv) – False
- (v) – False

Q1.(c) State whether the following statements are 'True' or 'False':

- (i) Standard hour is the standard time required per unit of production.
- (ii) Cost of tube used for packing tooth paste is indirect material cost.
- (iii) Fixed Cost vary with volume rather than time.
- (iv) Future costs are not relevant while making managerial decisions.
- (v) In break-even analysis it is assumed that variable costs fluctuate inversely with time.

Answer to Q.. 1. (c) :

- (i) – False
- (ii) – False
- (iii) – False
- (iv) – False
- (v) – False

Q1. (d) Fill up the blanks suitably :

- (i) A cost which does not involve any cash outflow is called _____ or _____.
- (ii) Contribution earned after reaching Break Even Point is _____ of the firm.
- (iii) Two broad methods of costing are _____ and _____.
- (iv) Idle time variance is always _____.
- (v) Profit-volume graph shows the relationship between _____ and _____.

Answer to Q. 1. (d)

- (i) – Notional Cost, Imputed Cost
- (ii) – Profit
- (iii) – Job Costing, Process Costing
- (iv) – Adverse
- (v) – Profit, Sales

Q.1.(e) 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.
- (ii) The scarce factor of production is known as
- (1) Linking factor;
 - (2) Key factor;
 - (3) Production factor.
- (iii) 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.
- (iv) 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.
- (v) 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.

Answer to Q. 1. (e)

- (i) – 800 units
- (ii) – Key Factor
- (iii) – Cost Allocation
- (iv) – Adverse Labour efficiency variance
- (v) – The earliest prices

Q.2. (a) Write a note on ABC system of Stores Control.

Answer to Question No. 2

- (a) In large manufacturing companies where stocks of direct materials and components consist of many different items, the task of maintaining inventory control independently on every individual item is obviously a difficult one. An effective inventory control system need not have all the items in the inventory treated in the same manner under the same control technique. The company should pay maximum attention to those items whose value is the highest. Thus the company should be selective in its approach to control investment in various types of inventories. This analytical approach is called the ABC Analysis and tends to measure the cost significance of each item of inventories and also the frequency of their replenishment. The highest value items are classified as "A items and would be under the tightest control, "C" items represent relatively least value and would be under simple control. "B" items fall in between these two categories and require reasonable attention of management. The ABC plan concentrates on corporate items and is also known as control by importance and exception.

Q.2. (b) :

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 |
| Above 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.

Answer Q. 2(b)Present cost of manufacture :

| | | |
|--------------------------|--------|----------|
| Wages per hour | Rs. | 7 |
| Overhead per hour | Rs. | 10 |
| Conversion Cost per hour | Rs. | 17 |
| Conversion Cost per unit | 17/5 = | Rs. 3.40 |

Statement showing advantage to employees

| Output | Time wages Per day Rs. | Piece Wages Per Unit Rs. | Per Day Rs. | Benefit to employees Rs. |
|--------|------------------------------|--------------------------------|----------------|--------------------------------|
| 40 | 56.00 | 1.30 | 52.00 | - 4.00 |
| 45 | 56.00 | 1.30 | 58.50 | + 2.50 |
| 55 | 56.00 | 1.65 | 90.75 | + 34.75 |
| 60 | 56.00 | 1.70 | 102.00 | + 46.00 |

Statement showing advantage to Management

| Output | Proposed Piecerate Rs. | Piece Wages Rs. | Overhead Rs. | Proposed Total Cost Rs. | Total Cost as per existing Scheme @ 3.40 Rs. | Savings Rs. |
|--------|------------------------------|--------------------|-----------------|-------------------------------|---|----------------|
| 40 | 1.30 | 52.00 | 80.00 | 132.00 | 136.00 | + 4.00 |
| 45 | 1.30 | 58.50 | 80.00 | 138.50 | 153.00 | +14.50 |
| 55 | 1.65 | 90.75 | 80.00 | 170.75 | 187.00 | +16.25 |
| 60 | 1.70 | 102.00 | 80.00 | 182.00 | 204.00 | +22.00 |

Q.3. (a) :

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

Answer Q.3(a)

For the purpose of decision making, costs are classified into two groups, namely relevant costs and irrelevant costs. Relevant costs are taken into consideration while making a particular decision.

Relevant costs are those which differ from one set of circumstances to another depending upon the nature of decision to be made. This concept is a valuable tool for decision making in a variety of situations. It should be used, however, with care and discretion. Thus the cost of petrol will be relevant if the decision to be made is between driving upto a destination or using another mode of transport such as train.

If a special price export order is to be evaluated, relevant costs will be additional variable costs, any overtime or other export related expenses. The relevant benefits will be export subsidies and incentives.

Q. 3. (b) :

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 would you recommend?

Answer Q.3(b) :

Fixed cost are not relevant to the decision since they are not directly related to the export order. They may be considered sunk cost or already incurred costs, whether or not the export order is accepted.

Statement of Comparative Profitability

| Capacity | 50% | 60% | 80% |
|--------------------------|-------|-------|-------|
| Production/Sales (units) | 5,000 | 6,000 | 8,000 |
| | Rs. | Rs. | Rs. |
| Material | 50.00 | 51.00 | 52.50 |
| Labour | 15.00 | 15.00 | 15.00 |
| Variable O/H | 9.00 | 9.00 | 9.00 |

| | | | |
|-----------------------|----------------------|----------------------|----------------------|
| Variable Adm. O/H | <u>5.00</u> | <u>5.00</u> | <u>5.00</u> |
| | 79.00 | 80.00 | 81.50 |
| Sales / Unit | <u>100.00</u> | <u>98.00</u> | <u>95.00</u> |
| Contribution / Unit | <u>21.00</u> | <u>18.00</u> | <u>13.00</u> |
| Total Contribution. | 1,05,000 | 1,08,000 | 1,08,000 |
| Fixed O/H | | | |
| (5000 x 6 + 5000 x 5) | <u>55,000</u> | <u>55,000</u> | <u>55,000</u> |
| Profit | <u>50,000</u> | <u>53,000</u> | <u>53,000</u> |

It can be observed from above that the profit is the same at 60% capacity and 80% capacity. At 80% capacity more production, more working capacity, more efforts are required to get the profit of Rs. 53,000 which is the same at 60% capacity. Hence 60% capacity production is recommended to achieve the profit of Rs. 53,000 which is more than the present profit of Rs. 50,000. More risk and more endeavours are involved for production and sales at higher level of 80% capacity.

Question : 4. (a) :

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

Answer to Question No. 4.(a) :

Inter firm comparison, as the name indicates, is a technique by which a company evaluates its performance with those of other firms in the same industry. Uniform cost accounting is a must for such meaningful comparison. To facilitate such comparison and evaluation, generally a central organization is formed to collect the necessary data periodically in a standard format from all member industries. To safeguard the confidentiality of the individual firm's performance details, the data are collected as a ratio or percentage by the central organisation in the industry. Information collected may relate to costs, capacity utilisation, raw material usage, labour productivity, ROI etc.

This comparison has many advantage which are as follows :

- (i) It promotes a sense of cost consciousness among member units and helps to improve their efficiency.
- (ii) It throws light on weak-areas and enables member units to take remedial action.
- (iii) It prevents unhealthy price cuffling.
- (iv) It enables the members to present a united stand before Government and other regulatory bodies.
- (v) An overall improvement in the industry will result in higher profit for member, more benefit to labour, lower prices to consumers and high revenue to the Government by way of taxes / duties.

Q.4. (b) :

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.

Answer Q.4.(b) :

It is given that availability of raw material is limited to the extent of 61,000 kg. only. It can be noticed that if the products are produced to the maximum possible extent according to the market demand, the resultant profit will be highest. However, it is not possible as the raw material is not available to that extent. Therefore it is necessary to find out priority of the product by ranking them on the basis of contribution per kg. of raw material.

| | <u>Product X</u> | <u>Product Y</u> | <u>Product Z</u> |
|------------------------------------|------------------|------------------|------------------|
| Selling Price per unit | Rs. 100 | Rs. 140 | Rs. 90 |
| <u>Less</u> : Variable cost / unit | <u>75</u> | <u>110</u> | <u>65</u> |
| Contribution per unit | Rs. 25 | 30 | 25 |
| Contribution per constraint | 25/5 | 30/8 | 25/6 |
| i.e., kg. of raw materials | = 5 | = 3.75 | = 4.16 |
| Priority Ranking | I | III | II |

It is evident that product X will be produced 1st to meet total market demand of 5000 units.

| <u>Product</u> | <u>No. of Units</u> | <u>Raw Mat. Consumed</u> | <u>Contribution</u> |
|----------------|---------------------|----------------------------------|---------------------|
| X | 5000 | 25,000kg. | Rs. 1,25,000 |
| Z | 4000 | 24,000kg. | 1,00,000 |
| Y | 1500 | 12,000kg.* | 45,000 |
| | | *(Balance to go upto 61,000 Kg.) | |
| | | <u>61,000kg.</u> | <u>Rs. 2,70,000</u> |

Amount of profit = Rs. 2,70,000 Less Rs. 1,50,000 (Fixed cost)
 = Rs. 1,20,000

This will be the highest profit in the given situation by producing
 5000 units of X
 1500 units of Y and
 4000 units of Z

Question 5.

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 are 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 :

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

Answer Q. 5 :

| | | |
|-----|---------------------------------------|------------|
| (a) | Computation of standard cost per unit | <u>Rs.</u> |
| | Direct Material | 200 |
| | Direct Labour | 66 |
| | Production overhead | 180 |
| | Standard cost per unit | 446 |

- (b) Computation of material cost variance (Actual production 4,800 units)

| Std.Qty. of raw matl.per unit of FG | Std. Price of raw matl. Per Kg. | Std.Qty. of raw matl. on actual Production | Actual qty. of raw malt. on actual production | Actual price of raw mati. per Kg. | Usage Variance | Price Variance |
|-------------------------------------|---------------------------------|--|---|-----------------------------------|----------------|----------------|
| (a) | (b) | (c) | (d) | (e) | (c-d)xb | (b-e)xb |
| 20kg. | Rs.10 | 9600Kgs. | 10000Kgs. | Rs.10,50 | (40000) | (50000) |

- (c) Computation of labour rate and efficiency variance (Actual production : 4,800 units)

| Std.time Per unit of FG | Std. Rate Per Hr. | Std. time on actual production | Actual time on actual production | Actual rate per hr. | Efficiency Variance | Rate Variance |
|-------------------------|-------------------|--------------------------------|----------------------------------|---------------------|---------------------|---------------|
| (a) | (b) | (c) | (d) | (e) | (c-d)xb | (b-e)xe |
| 12hrs. | Rs.5.50 | 57600hrs. | 62000hrs. | Rs. 5.00 | (24200) | 31000 |

- (d) Computation of overhead variance (Actual production : 4,800 units)

| Capacity | Actual Production | Std. total fixed overheads | Actual total fixed overheads | Std. fixed overheads per unit | Production volume variance | O/H Expid. Variance |
|-----------|-------------------|----------------------------|------------------------------|-------------------------------|----------------------------|---------------------|
| (a) | (b) | (c) | (d) | (e) | (c-d)xb | (b-e)xb |
| 5000units | 4800units | Rs.900000 | Rs.926000 | 180 | (36000) | (26000) |

Q.6. (a) :

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.

Answer Q.6. (a)

Statement showing fare to be charged

| Particulars | Amount Annum (Rs.) | Amount / Month (Rs.) |
|---|--------------------|----------------------|
| (A) Standing Charges | | |
| * Insurance @ 3% on Rs. 1,00,000 | 3,000 | |
| * Tax | 2,000 | |
| * Garage Rent @ Rs. 200/- month | 2,400 | |
| * Driver's Salary @ Rs. 300/- month | 3,600 | |
| * Conductor's Salary @ Rs. 200/- month | 2,400 | |
| * Stationery @ Rs. 100/- month | 1,200 | |
| * Manager cum-accountant's salary @ Rs. 700 month | 8,400 | |
| * Total Standing Charges | 23,000 | 1,916.67 |
| (B) Running Expenses | | |
| * Depreciation Rs. 1,00,000/5 | 20,000 | 1,666.67 |
| * Repairs | 2,000 | 166.66 |
| * Petrol & Oil Rs. 0.50 X [40km X 2 X 3 X 25] | | 3,000.00 |
| * Commision | | 900.00 |
| * Profit | | 1,350.00 |
| Total Taking | | 9,000.00 |
| Fare per Passenger Kilometer (Rs. 9000 / 2,40,000 #) | 0.0375 | 0.0375 |
| Fare / Pasenger (Rs. 9000 / 6000) | | Rs. 1.50 |

- * Computation of Commission and Profit.
Less: Total taking be x

$$\text{Commission @ 10\%} = \frac{x}{10}, \text{ Profit is 15\% of taking.}$$

$$\text{Hence Profit} = \frac{15x}{100} = \frac{3x}{20}$$

- * Total cost without commission = Rs. 6,750 (Standing Charges + Running Charges)

$$\text{Hence } x = \text{Rs. } 6,750 + \frac{x}{10} = \frac{3x}{20}$$

Solving the equation for x we get x = Rs. 9,000, which is total takings.

- * Therefore, commission will be 10% of total taking = Rs. 900

- * Profit @ 15% of total taking = Rs. 1,350

Total passenger kilometers an computed is shown below :

$$40 \text{ km.} \times 2 \text{ (up + down)} \times 3 \text{ trips} \times 25 \text{ days} \times 40 \text{ passengers}$$

$$= 2,40,000 \text{ Passenger km / month.}$$

Question 6.(b) :

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 : | 12,00,000 | Total : | 12,00,000 |
| To Administration Expenses : | 60,000 | By Gross Profit : | 1,20,000 |
| To Net Profit : | 66,000 | By Dividends Received : | 6,000 |
| Total : | 1,26,000 | Total : | 1,26,000 |

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 Profit & Loss A/c. and reconcile the profit with financial profit.

Answer to Q. 6(b)

A. Statment showing Profit as per cost Accounts

| Particulars | Amount (Rs.) | Amount (Rs.) |
|--|---------------|-----------------|
| Purchase of Materials' | 4,80,000 | |
| <u>Less: Work-in-progress</u> | <u>30,000</u> | 4,50,000 |
| Wages | 3,60,000 | |
| <u>Less: Work-in-progress</u> | <u>18,000</u> | 3,42,000 |
| Direct Expenses : Rs. 30/kg. X 6000 kg. | | 1,80,000 |
| Administrative Expenses: Rs. 15/kg. X 6000 | | 90,000 |
| Cost of Production of 6000 units | | 10,62,000 |
| <u>Less: Closing Stock - 1200 units*</u> | | <u>2,12,400</u> |
| Cost of Goods sold - 4800 units | | 8,49,600 |
| Sales | 9,60,000 | |
| Profit as per cost accounts | | 1,10,400 |

Value of closing stock is computed as shown below :

For 6000 units, the cost of price is Rs. 10,62,000. So for 1200 units, the cost of production will be Rs. $10,62,000 / 6000 \times 1200 = \text{Rs. } 2,12,400$

B. Reconciliation Statement:

| Particulars | Amount (Rs.) |
|--|---------------|
| Profit as per Cost Accounts | 1,10,400 |
| <u>Add : Over absorption of administration overheads in cost accounts only (Rs.90000 - Rs.60000)</u> | <u>30,000</u> |
| <u>Add: Dividends received recorded in financial accounts only</u> | <u>6,000</u> |
| Total | 1,46,400 |
| <u>Less: Over - valuation of Closing Stock: (Rs.180000-212400)</u> | <u>32,400</u> |
| under abserption of direcy expenses in cost accounts : (Rs. 180000 - Rs.228000) | 48,000 |
| Total | 80,400 |
| Profit as per financial accounts : | 66,000 |

- * Administration overheads incurred on Rs. 60,000 as per the financial accounts. However in cost accounts, the amount charged is Rs. 90,000, (as the per unit administrative overheads are Rs. 15/ kg. and the total production during the year was 6000 kgs., which means, the administrative overheads recovered in cost accounts are Rs. 90,000) thus resulting in overabsorption of Rs. 30,000.
- ** Closing stock as per Financial accounts is Rs. 1,80,000 while as per cost accounts, the value comes as Rs. 2,12,400. Hence over valuation of Rs.32,400 in cost accounts.
- *** Direct Expenses as per Financial accounts as Rs. 2,28,000 [Rs. 2,40,000 Rs. 12,000 WIP] while in cost accounts, the amount recovered is Rs. 1,80,000.

Q. 7. (a) :

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) | Jupiter Co. (Rs. '000) |
|-------------------------------|----------------------------|---------------------------|
| Sales | 300 | 300 |
| <u>Less : Variable Cost :</u> | | |
| 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.

Answer Q. 7 (a) :

Statement of BEP

| | Starlight Co. (Rs. 000) | Jupiter Co. (Rs. 000) |
|-----------------|----------------------------|--------------------------|
| Sales | 300 | 300 |
| Variable Cost | <u>240</u> | <u>200</u> |
| Contribution | 60 | 100 |
| Fixed Cost | <u>30</u> | <u>70</u> |
| Budgeted Profit | 30 | 30 |
| P/V Ratio X 100 | <u>60</u> 300 | <u>100</u> 300 |

| | | | |
|------------------|-------------------------------|-----------------------|--------------------------|
| | | = 20% | = 331/3% |
| BEP = | $\frac{F}{P/V \text{ Ratio}}$ | $\frac{30,000}{20\%}$ | $\frac{70,000}{331/3\%}$ |
| | | Rs. 1,50,000 | Rs. 2,10,000 |
| Margin of Safety | Rs. 3,00,000 - 1,50,000 | 3,00,000 - 2,10,000 | |
| (Sales - BE = P) | Rs. 1,50,000 | 90,000 | |

- (i) In case of high demand, Jupiter co. is more profitable as its PV ratio is- higher at 331/3%. After meeting its fixed cost of Rs. 70,000 the profit in Jupiter co. will be 331/3% of sales, where as, it will be 20% of sales in case of Starlight Co. after meeting its fixed cost of Rs. 30,000.
- (ii) In case low demand, Starlight Co. is more profitable as its fixed cost and BEP are very low. After meeting fixed cost of Rs. 30,000 it will earn profit. Margin of safety is also higher in case of starhight co. Even if the sale is reduced to 50% due to low demand, it will touch BEP and the co. will not incur any loss.

Q. 7.(b) :

State clearly limitation of Activity Based Costing.

Answer Q. 7. (b) :

Though Activity based costing system is very effective, it suffers from some limitation as given below:

- (i) Activity Based costing is a complex system and requires lot of records and tedious calculations.
- (ii) For small organisation, traditional cost accounting system may be more beneficial than Activity Based costing due to the simplicity of operation of the former.
- (iii) Sometimes it is difficult to attribute costs to single activities as some costs support several activities.
- (iv) There is a need of trained professionals who are limited in number.
- (v) This system will be sucessful if there is a total support from the top management.
- (vi) Substantial investment of time and money is requiredfor the implementation of this system.

Q. 8. Write short notes on any three of the following:

- a) Managerial Decision Making;
- b) Inter-Firm Comparison;
- c) Zero-Base Budgeting;
- d) Uniform Costing;

- e) Budget Manual;
- (f) JIT.

Answer to Q.8: (a) :

Managerial Decision Making is a very crucial function in any organisation. Decision making should be on the basis of the relevant information. For Example, marginal costing helps in generating relevant information in certain critical areas like :-

- * Make or buy decisions.
- * Accepting or rejecting an expert order.
- * Variation in selling price.
- * Variation in Product Mix.
- * Variation in Sales Mix.
- * Key factor analysis.
- * Evaluation of different alternatives regarding profit improvement.
- * Closing down / Continuation of a division.
- * Capital Expenditure decision.

The concept of Break Even Point is extremely important for decision making in various areas.

Answer to Q. 8 (b) :

Inter - Firm comparison is a management technique by the use of which it is made possible for an organization to compare its performance with that of the other units engaged in the same activity. Thus, it is a technique of evaluation and is based upon a comparison of productivity, efficiency, cost & profit as yard stick among the different business units in a same industry. There are a way available for such a comparison

- (i) Where such comparison is made from freely available published information and
- (ii) Where there is voluntary and authentic exchange of information among the different units systematically and scientifically.

Answer to Q. 8 (C) :

Zero Base Budgeting is a method of budgeting starting from scratch or zero level. Proposals for the coming period should be based on merit and not related to past performance. Budgets prepared by conventional methods are the incremental type of budget based on actual performance in the past periods. In the zero base budget, the results of the past year is not accepted as a basis, since the past may conceal inefficiencies.

Zero Base budget is mainly prepared by taking the following steps.

- (i) Identification of decision units.
- (ii) Preparation of decision packages.
- (iii) Ranking of decision package using cost benefit analysis.
- (iv) Allotment of available funds according to the priority determined by ranking each decision package is a self contained module explaining the need for a certain activity, its costs,

its benefits consequences if the packages is not accepted, etc. The ranking of package based on cost benefit analysis by the difficult levels of management starting from the bottom upwards ensures allotment of funds to relatively more important and essential activities.

Answer to Q.8(d) :

Uniform costing is the use by several undertaking of the same costing principles and or practices. The goal is set with uniformity of principles and similarity of methods with the understanding that in a particular undertaking there may exist conditions which require variations in some respects from absolute uniformity.

Features of uniform costing are as follows :

- (i) Common bases for the apportionment and allocation of overhead to be followed by all units in the same industry.
- (ii) The departments sections or production centres to be used for analysis and comparison of costs to be determined
- (iii) What items shall be regarded as factory or distinct from administration expenses to be clearly indicated
- (iv) Common basis for recovery of overheads.
- (v) Common rates of depreciation should be applied to plant and machinery.
- (vi) Uniform method of arriving service departments cost.
- (vii) To set up an organisation to prepare comparative statistics for the use of those adopting the uniform system. Privacy of individual data and confidence in the co-ordinating office are essential factors.

There may be some operational problems in this system. The mainpoint is the mutual understanding and belief if that is built in good sense it certainly brings all benefits to the concerned parties.

Answer Q.8. (e) :

A Budget Manual is a documents which sets out the responsibilities of the persons engaged in the process of budgetary control. The Budget Manual thus is a schedule documents or booklet, which contains different forms to be used, procedures to be followed, budgeting organisation details, and set of instructions to be followed in the budgeting system. It also list, out details of the responsibilities of different persons and the managers involved in the process. A typical Budget Manual contains the following :-

- (i) Objectives and Managerial policies of the business concern.
- (ii) Internal lines of authorities and responsibilities.
- (iii) Functions of the Budget Committee. including the role of Budget officer.