Printed Pages : 12 **MBA-026**

(Following Paper ID and Roll No. to be filled in your Answer Book)

**PAPER ID : 7115** Roll No. | | | | | | | | | | |

# M. B. A.

## (Second Semester) Theory Examination, 2010-11

## COST & MANAGEMENT ACCOUNTING

*Time : 3 Hours]* *[Total Marks : 100*

*Note :* (i) This question paper contains three Sections.

(ii) All questions are compulsory.

### Section-A

1. Attempt *all* parts of this question. $1\times20=20$

Indicate whether the following statements are 'True' or 'False' :

(i) Generally accepted accounting principles constitute the basis for the preparation of management accounting reports.

(ii) Taylor piece rate system has differential piece rates.

(iii) Factory overheads are direct manufacturing costs.

(iv) Factory overheads are common costs and are shared among various cost centres.

(v) ABC system uses cost centres for accumulating costs.

(vi) A job cost-sheet is the backbone of job costing.

(vii) In process costing, unit cost is determined periodically.

(viii) Variable costing and absorption costing techniques are similar to job and process costing.

(ix) Standard costs are the measures of acceptable cost performance.

(x) Material price variance is an uncontrollable variance.

Fill in the following blanks :

(xi) The accounting information specifically prepared to aid managers is called .................... information.

(xii) Costs that are important to decision makers, but are not recorded in financial accounting records are ................................

(xiii) ............................ report forms the backbone of the process cost records.

(xiv) Where the joint products are heterogeneous, it is appropriate to use ........................... method.

(xv) Overall budget is also known as.........................

(xvi) .................... estimates costs at several levels of activity.

(xvii) Budgets are important tools of .......................... .

(xviii) Management should focus more on .......................... variances.

(xix) Responsibility accounting focuses on ...............

(xx) Responsibility centres are ................and ..........................

## Section-B

2. Attempt any *one* of the following : 1×30=30

(a) ABC Corporation Limited is planning profit for the current year. The Managing Director of the company has asked the Accounts and Finance Department to prepare the budget outlining the implications of achieving the profit goal of Rs. 7 lakh. The budgeting department has compiled the information related to its operating and financing activities as detailed in schedules I to VII.

I. Balance Sheet as at March 31 of the Current Year

| Liabilities | Amount Rs. | Assets | | Amount Rs. |
|---|---|---|---|---|
| Share Capital | 31,77,428 | Fixed Assets | Rs 48,00,000 | |
| Retained Earnings | 18,96,400 | Less: Accumulated | | |
| Creditors | 44,000 | Depreciation | Rs. 36,00,000 | 12,00,000 |
| Taxes Payable | 74,000 | Inventories : | Rs. | |
| | | Direct materials | 1,35,828 | |
| | | Finished goods | 1,60,000 | 2,95,828 |
| | | Debtors | 11,20,000 | |
| | | Less: Provision for | | |
| | | Bad debts | 64,000 | 10,56,000 |
| | | Cash | | 2,40,000 |
| | 51,91,828 | | | 51,91,828 |

Notes :

(i) Debtors include Rs. 1,60,000 from the third quarter sales of Rs 20,00,000 and Rs. 9,60,000 from fourth quarter sales of Rs. 12,00,000; (ii) Direct materials include 6,300 kg of material A @ Rs. 5.88/kg and 12,600 kg of material B @Rs. 7.84/kg; and (iii) Finished goods include 4,000 units @Rs. 40/unit.

II. Budget Assumptions

(i) Selling price Rs. 60 per unit

(ii) Quarterly sales forecast (units).

| Quarter | Next year | Year following next year |
|---|---|---|
| First | 20,000 | 30,000 |
| Second | 30,000 | |
| Third | 40,000 | |
| Fourth | 20,000 | |

III. Inventory Policy

(i) Finished goods : 20% of the following quarter's requirements at the end of each quarter.

(ii) Raw materials : 30% of the following quarter's requirements at the end of each quarter.

(iii) The firm wishes to have 9,200 kg of each type of direct material on hand at March 31 of the next year.

IV. Manufacturing cost per unit :

| | | |
|---|---|---|
| Direct material | | |
| 1 kg of A @ Rs. 5.88 | Rs. 5.88 | |
| 2 kg of B @ Rs 7.84 | 15.68 | Rs. 21.56 |
| Direct labour : | | 4.00 |
| Overheads : | | |
| Variable (0.5×direct labour-hour @ Rs 12) | Rs. 6.00 | |
| Fixed (Rs 8,44,000 per year/Normal level of activity, 1,00,000 units) | 8.44 | Rs. 14.44 |
| Total | | 40.00 |

The quarterly fixed manufacturing costs of Rs. 2,11,000 include depreciation totalling Rs. 50,000. All production variances are written off as an adjustment to the cost of goods sold in the period in which they occurred. The firm follows absorption costing method for income determination.

V. Selling and administrative costs :

Commission and distribution, Rs. 6 per unit sold

Advertising, Rs. 10,000 per quarter

Administrative, Rs. 2,00,000 per quarter.

VI. Cash disbursement policy : Raw materials are purchased on terms of 2/10, net/30. Discount is always taken and purchases are recorded at net; 90% of the purchases are paid for in the quarter of purchase and remainder are paid for in the following quarter. The list prices of materials A and B are Rs. 6/kg and Rs. 8/kg respectively. With the exception of income taxes, which are paid during the following quarter, all other payments are made when incurred.

VII. Cash collection experience : 20% sales are for cash and 80% are on credit. The terms of sales are 2/10, net/60 days. However, for payments, the sales are billed to customers on the first day of the following quarter; 50% of the credit sales are collected during the discount period and another 40% are received after the discount period but during the quarter in which the billing is done: 7.5% are received during the following quarters and 2.5% are bad debts. These accounts are written off at the end of the II quarter following the sales. A provision of 2% of sales is made for bad debts at the time of sales. Sales discount are recorded as a deduction from the sales in the quarter the discounts are taken. Based on the prior experience, this deduction equals 0.8% of the previous quarter's sales $(0.8 \times 0.5 \times 0.02)$.

VIII. Other information :

(i) Income -Tax Rate is 50%

(ii) Cash dividends amount to Rs. 80,000 at the end of quarter II and quarter IV.

(iii) At the end of the IVth quarter, equipment costing Rs 6,00,000 was purchased.

Prepare a comprehensive, quarterwise, budget to show the projected income of ABC Corporation Limited for the year.

(b) XYZ Ltd. is an auto parts manufacturing company. XYZ has shown consistently profitable performance over the last 8 years. However, in the last quarter of the current year, XYZ's net profit and net sales dipped by 20% and 25% respectively. The CEO of XYZ Ltd. Directed the Controller, to present an account of the budgeted and actual performance of the company for the current month. The controller prepared the following two exhibits with the help of chief accountant :

Exhibit 1 : Cost/Profit Data for the month

Standard Data :

| | | | |
|---|---|---|---|
| (i) | Material cost (per unit): | Rs. | |
| | Material A (5 kg @ Rs 50/kg) | 250 | |
| | Material B(3kg @ Rs 70/kg) | 210 | |
| | Material C (2kg @ Rs 105/kg) | 210 | 670 |
| (ii) | Labor cost (per unit): | | |
| | Department X(6 hours × Rs. 20/hr) | 120 | |
| | Department Y (4 hours × Rs 25/hr) | 100 | |
| | | | 220 |
| (iii) | Variable overheads per unit | | |
| | (10 hours×Rs. 10/hr) | | 100 |
| (iv) | Fixed overheads per unit | | |
| | (10 hours×Rs 8/hr) | | 80 |
| | | | 1,070 |

| | | | |
|---|---|---|---|
| (v) | Unit sale price | | 1,400 |
| (vi) | Budgeted sales (units) | | 4,000 |
| (vii) | Normal capacity (units) | | 5,000 |
| (viii) | Budgeted fixed overheads (Rs) | | 4,00,000 |

Actual Data :

| | | | |
|---|---|---|---|
| (i) | Material cost (total): | | |
| | Material A (24,500 kg @ Rs . 48/kg) | 11,76,000 | |
| | Material B (10,500 kg @ Rs 72/kg) | 7,56,000 | |
| | Material C (3,500 kg @ Rs 105/kg) | 3,67,500 | 22,99,500 |
| (ii) | Labour cost (total): | | |
| | Department X (28,000 hours @ Rs 18/hr) | 5,04,000 | |
| | Department Y (10,500 hours @ Rs 27/hr) | 2,83,500 | 7,87,500 |
| (iii) | Variable overheads (38,500 hours @ Rs 11/hr) | | 4,23,500 |
| (iv) | Fixed overheads | | 4,20,000 |
| (v) | Sales (units) | | 3,500 |
| (vi) | Unit sale price (Rs) | | 1,350 |

Exhibit 2 : Profit Calculations-Budgeted and Actual

| Budgeted profit : | Rs. |
|---|---|
| Budgeted profit per unit, | |
| Rs 330× Budgeted sales, 4,000 units | 13,20,000 |
| Actual Profit : | |
| Sales (Rs 1,350 ×3,500 units) | 47,25,000 |

| | | | |
|---|---|---|---|
| Less costs : | | | |
| Material costs : | | | |
| Material A | Rs.11,76,000 | | |
| Material B | 7,56,000 | | |
| Material C | 3,67,500 | 22,99,500 | |
| Labour costs : | | | |
| Department X | 5,04,000 | | |
| Department Y | 2,83,500 | 7,87,500 | |
| Variable overheads | | 4,23,500 | |
| Fixed overheads | | 4,20,000 | 39,30,500 |
| Profit | | | 7,94,500 |

Required :

Prepare a detailed variance analysis and highlight the remedial measures that XYZ Ltd. should take to remedy the situation arising out of declining profitability and sales in recent months and fix responsibility for variances.

## Section-C

Attempt *all* questions. 12½×4=50

3. (a) Are all fixed costs sunk costs ? Explain.

   (b) What are opportunity costs ? Are opportunity costs relevant in decision-making ? Explain with examples.

*Or*

What is a job cost-sheet ? Prepare a comprehensive job cost-sheet of a firm having two departments.

4. Distinguish between marginal costing and absorption costing. Also examine their relative appropriateness.

*Or*

Discuss the importance of the following in relation to break-even analysis :

(a) Break-even point

(b) Margin of safety

(c) Contribution

(d) Profit volume ratio.

5. What do you understand by the terms budget and budgetary control ? What are the advantages of budgetary control ?

*Or*

What is the significance of the term "variance" relating to standard costing ? What types of variances are computed for (a) materials, (b) labour, and (c) factory overheads ?

6. What is a transfer price ? What are different types of transfer prices ? Under what circumstances is each type of transfer price appropriate and useful ?

*Or*

What is responsibility accounting ? Discuss its significance in divisional performance measurement. Briefly the target costing process.