Seat No. :
XF-101
T.Y.B.B.A

March-2013

## MANAGEMENT ACCOUNTING

Time : 3 Hours]
[Max. Marks : 70

Instruction: (1) Figures to the right indicate marks.
(2) Show calculations as part of your answer.

1. (A) Calculate the overheads applicable to production departments A and B. There are also two service departments X and Y. X renders service worth ₹ 12,000 to Y and balance to $A$ and $B$ in the ratio of $3: 2$. $Y$ renders service to $A$ and $B$ in the ratio of 9:1.

|  | A | B | X | Y |
| :--- | :---: | :---: | :---: | :---: |
| Floor space (Sq. feet) | 5000 | 4000 | 1000 | 2000 |
| Assets ( ₹ in lacs) | 10 | 5 | 3 | 1 |
| H.P. of machines | 1000 | 500 | 400 | 100 |
| Number of workers | 100 | 50 | 50 | 25 |
| Light Points | 50 | 30 | 20 | 20 |
| Expenses are : | $\mathbf{( ₹ )}$ |  |  |  |
| Depreciation | $1,90,000$ |  |  |  |
| Rent and Rates | 36,000 |  |  |  |
| Insurance | 15,200 |  |  |  |
| Power | 20,000 |  |  |  |
| Canteen Expenses | 10,800 |  |  |  |
| Electricity \& Lighting | 4,800 |  |  |  |

## OR

(A) Do as directed : (any seven)
(i) Management accounting deals with both quantitative and qualitative information. (True/False)
(ii) Management accounting and Cost accounting functions are complementary in nature. (True/False)
(iii) On the basis of behaviour costs can be classified as $\qquad$ and
$\qquad$ . (Fill in the gaps)
(iv) Financial accounting is historical in nature while Management accounting is futuristic in nature. (True/False)
(v) Re-apportionment of service department's costs is known as $\qquad$ distribution of overheads. (Primary/Secondary)
(vi) Fixed cost per unit remains fixed when output level changes. (True/False)
(vii) Overheads are also called indirect expenses. (True/False)
(viii) Sundry expenses can be best apportioned on the basis of $\qquad$ . (Direct wages, Indirect wages)
(ix) Total variable cost changes with change in the volume of output. (True/False)
(B) Write a note on pre-requisites of a good reporting system.

## OR

(B) Explain Routine Reports and Special Reports.
2. The standard material input required for 1000 kgs . of a finished product are given below: $\mathbf{1 0}$

| Material | Quantity <br> (Kgs) | Standard rate <br> per Kg. (₹) |
| :--- | ---: | :---: |
| P | 450 | 20 |
| Q | 400 | 40 |
| R | 250 | 60 |
| Total | 1100 |  |
| Standard loss | 100 |  |
| Standard output | 1000 |  |

Actual production in a period was $20,000 \mathrm{kgs}$. of finished product for which the actual quantities of material used and prices paid thereof were as under :

| Material | Quantities <br> (Kgs) | Rate per Kg <br> (₹) |
| :--- | :--- | :---: |
| P | 10,000 | 19 |
| Q | 8,500 | 42 |
| R | 4,500 | 65 |

Calculate :
(i) Material cost variance
(ii) Material price variance
(iii) Material usage variance
(iv) Material mix variance
(v) Material yield variance

## OR

(A) From the following, calculate labour variances for department A \& B.

## Dept. A Dept. B

| Actual direct wages | $₹ 2,000$ | $₹ 1,800$ |
| :--- | :--- | :--- |
| Standard hours worked | 8000 | 6000 |
| Standard rate per hour | 30 paise | 35 paise |
| Actual hours worked | 8,200 | 5,800 |

(B) The budgeted / actual sales of a concern manufacturing a single product are furnished below :

Budgeted sales : 10,000 units @ ₹ 4 per unit.
Actual sales : 5,000 units @ ₹ 3.50 per unit.

$$
\text { 8,000 units @ ₹ } 4.00 \text { per unit. }
$$

Calculate :
(i) Sales price variance
(ii) Sales volume variance
3. Teddy Toys manufactures two varieties of toys $A$ and $B$ and sells them to markets $X$ \& Y. The following information is made available for the current year :

| Market | Types | Budgeted Sales | Actual Sales |
| :--- | :--- | :--- | :--- |
| X | A | 400 @ ₹ 9 each | 500 @ ₹ 9 each |
|  | B | 300 @ ₹ 21 each | $200 @$ ₹ 21 each |
| Y | A | $600 @$ ₹ 9 each | $700 @$ ₹ 9 each |
|  | B | $500 @$ ₹ 21 each | $400 @$ ₹ 21 each |

Market studies reveal that toy ' A ' is popular and it is underpriced. It is observed that if its price is increased by ₹ 1 it will still find a ready market. On the other hand, toy ' B ' is overpriced and market could absorb more sales if its selling price is reduced to ₹ 20 . The management has agreed to give effect to the above price changes.

On the above basis, the following estimates have been prepared by the sales manager.
Percentage increase in sales over current budget

| Type of product | Market ' X ' | Market ' Y ' |
| :---: | :--- | :--- |
| A | +10 percent | +5 percent |
| B | +20 percent | +10 percent |

With the help of an intensive advertisement campaign, the following additional sales above the estimated sales of sales manager are possible :
Product Market ' X ' Market ' Y '

| A | 60 units | 70 units |
| :--- | :--- | :--- |
| B | 40 units | 50 units |

Prepare a sales budget incorporating the above estimates.

## OR

The budget for production of 10,000 units in a factory are furnished below :
ParticularsMaterial
Per Unit (₹)70
Labour ..... 25
Variable overheads ..... 20
Fixed overheads (₹1,00,000) ..... 10
Variable expenses (direct) ..... 5
Selling expenses (10\% fixed) ..... 13
Distribution expenses (20\% fixed) ..... 7
Administrative expenses (₹50,000) ..... 5

Prepare a budget for production of 6000 and 8000 units showing total cost as well as per unit cost. Administrative expenses are fixed for all levels of production.
4. (A) The following data are obtained from the records of a factory :
Sales (4000 units @ ₹ 25 each) 1,00,000

Less costs :
Materials consumed 40,000
Labour 20,000
Variable overheads 10,000
Fixed overheads 18,000
88,000

Profit
12,000
Calculate :
(i) Number of units by selling which the company will break-even.
(ii) Number of units to be sold to earn present profit if it is proposed to reduce the selling price by $20 \%$ and $25 \%$.
(iii) Selling price to be fixed to bring down the break-even point to 600 units under present conditions.
(A) Following data is available :

## Week I Week II

| Sales (₹) | 30,000 | 38,000 |
| :--- | ---: | ---: |
| Profit (₹) | 800 | 2,400 |

Find out :
(i) Weekly and yearly fixed cost.
(ii) Yearly break even point.

Assume 52 weeks in a year.
(B) XYZ Ltd. produces 3 products A, B and C. Details of current demand, selling price and cost structure are given below :

## Particulars

Expected demand (in units)
Selling price per unit (₹)
Variable cost per unit (₹)

| Direct materials (₹ 10/kg) | 6 | 4 | 2 |
| :--- | :---: | :---: | :---: |
| Direct labour | 3 | 3 | 1.5 |
| Variable overheads | 2 | 1 | 1 |
| Fixed overhead per unit (₹) | 5 | 4 | 2 |

During the next year the company anticipates that the raw materials available will be only 12,100 kgs. Suggest an optimum sales mix assuming raw material as the limiting factor. Also compute the profit for the sales mix suggested by you.

## OR

(B) (i) Manufacture of product A takes 20 hours on machine No. 101. It has a selling price of ₹ 150 and marginal cost of ₹110. Component part Y could be made on machine No. 101 in 4 hours. The marginal cost of component part is ₹9. The outside supplier is ready to supply the component at ₹ 15 . Should one make or buy component Y assuming that Machine No. 101 is working at full capacity.
(ii) Explain the following cost concepts with the help of example. (any three) 6
(1) Opportunity Cost
(2) Relevant Cost
(3) Out-of-Pocket Cost
(4) Sunk Cost
(5) Differential Cost
5. (A) What is Transfer Pricing ? Explain the Market - based Pricing methods. 7
OR

Discuss the essentials of an effective responsibility accounting system.
(B) Explain the behaviour of costs and profits during the various stages of product life cycle.

## OR

"Uniform costing is beneficial to the firms, customers and society as a whole". Comment.

