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# GUJARAT TECHNOLOGICAL UNIVERSITY <br> MBA - SEMESTER-II • EXAMINATION - SUMMER 2013 

Subject Code: 820001
Date: 13-05-2013
Subject Name: Cost and Management Accounting Time: 10:30am - 01:30pm Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
Q. 1 (a) With the following data for a $50 \%$ activity, prepare a budget at $75 \%$ and $100 \%$ activity:

| Production at 50\% capacity | 500 units |
| :--- | :--- |
| Materials | Rs.100 per unit |
| Labour | Rs.50 per unit |
| Expenses | Rs.10 per unit |
| Factory Expenses | Rs.50,000 (40\% Fixed) |
| Administration Expenses | Rs.40,000 (50\% Fixed) |

(b) Define Cost Accounting. Explain the advantages of cost accounting.
Q. 2 (a) A gang of workers normally consists of 30 men, 15 women and 10 boys. They are paid at standard rates per hour as Man Ç Rs.0.80, Woman-0.60, and Boy-Rs.0.40. In a normal working week of 40 hours, the gang is expected to produce 2,000 units of output. During the week ended $31^{\text {st }}$ December, the gang consisted of 40 men, 10 women and 5 boys. The actual wages paid were @Rs.0.70, Rs.0.65 and Rs.0.30 respectively. 1,600 units were produced. Four hours were lost due to abnormal idle time. Calculate: 1. Wage Variance, 2. Wage Rate Variance, 3. Labour Efficiency Variance 4. Idle item Variance 5. Labour Mix Variance and 6. Labour Yield Variance.
(b) What is over-absorption and under absorption? State the reasons for over and under absorption.

## OR

(b) The Choice Chemicals Company supplies, you the following details from its cost records:

| Particulars | Rs. |
| :--- | ---: |
| Stock of raw material on $1^{\text {st }}$ September, 2012 | 75,000 |
| Stock of raw material on $30^{\text {th }}$ September, 2012 | 91,500 |
| Direct Wages | 52,500 |
| Indirect Wages | 2,750 |
| Sales | $2,00,00$ |
|  | 0 |
| Work-in-Progress on 1 ${ }^{\text {st }}$ September, 2012 | 28,000 |
| Work-in-Progress on 30 ${ }^{\text {th }}$ September, 2012 | 35,000 |
| Purchases of raw materials | 66,000 |
| Factory rent, rates and power | 15,000 |
| Depreciation on plant and machinery | 3,500 |
| Expenses on Purchases | 1,500 |


| Carriage outward | 1,000 |
| :--- | ---: |
| Advertising | 5,000 |
| Office rent and taxes | 2,500 |
| Travellers Wages and Commission | 6,500 |
| Stock of finished goods on $1^{\text {st }}$ September, 2012 | 54,000 |
| Stock of finished goods on $30^{\text {th }}$ September, 2012 | 31,000 |

Prepare a Cost Sheet giving the maximum possible break-up of cost and profit.
Q. 3 (a) The following direct costs were incurred on Job Nos. 555 of Philips Radio Company.

| Materials | Rs.6,010 |
| :--- | :--- |
| Wages: |  |
| Dept. A-60 hours @ Rs.30 per hr. |  |
| Dept. B-40 hours @ Rs.20 per hr. |  |
| Dept. C-20 hours @ Rs.50 per hr. |  |
| Overhead for these three department were estimated as follows: |  |
| Variable Overheads: |  |
| Dept. A- Rs.15,000 for 1,500 labour hours |  |
| Dept. B- Rs.4,000 for 200 labour hours |  |
| Dept. C- Rs.12,000 for 300 labour hours |  |
| Fixed Overheads: |  |
| Estimated at Rs.40,000 for 2,000 normal working hours. |  |

You are required to calculate the cost of Job 555 and calculate the price to give profit of $25 \%$ on Selling Price.
(b) Write a short note on Batch Costing.

## OR

Q. 3 (a) A Company, manufacturing two products, furnishes the following data for two products:

| Product <br> s | Annual <br> Output <br> (Units) | Total <br> Machine <br> Hours | Total Number <br> of purchase <br> Orders | Total <br> Number of <br> Set-ups |
| :--- | ---: | ---: | ---: | ---: |
| A | 5,000 | 20,000 | 160 | 20 |
| B | 60,000 | $1,20,000$ | 384 | 44 |

The annual overhead are as under:

| Particulars | Rs. |
| :--- | ---: |
| Volume related activity costs | $5,50,00$ |
|  | 0 |
| Set-up related costs | $8,20,00$ |
|  | 0 |
| Purchase related costs | $6,18,00$ |
|  | 0 |

You are required to calculate the cost per unit of each product A and B on the basis of Activity Based Costing Method.
(b) What is operating costing? To what industries is this method of costing applicable?
Q. 4 (a) A product passes through three processes A, B and C. The normal wastage of each process is as follows: Process A-3\%, Process B-5\% and Process C-8\%. Wastage of Process A was sold at 25 paise per unit, that of Process B at 50 paise per unit and that of Process $C$ at Re. 1 per unit.

10,000 units were issued to Process A in the beginning of October 2012 at a cost of Re. 1 per unit. The other expenses were as follows:

| Particulars | Process A | Process B | Process C |
| :--- | ---: | ---: | ---: |
| Sundry Materials | Rs.1,000 | Rs.1,500 | Rs. 500 |
| Labour | Rs.5,000 | Rs.8,000 | Rs.6,500 |
| Direct Expenses | Rs.1,050 | Rs.1,188 | Rs.2,009 |
| Actual Output | 9,500 units | 9,100 units | 8,100 units |

Prepare the process accounts, assuming that there was no opening or closing stocks.
(b) What are By-Products? What is the method of accounting for byproduct?

## OR

Q. 4 (a) The following costs and sales of a manufacturing company for the first half and second half of 2012-13 are given:

| Particulars | First Half | Second Half |
| :--- | :---: | ---: |
| Sales | Rs.24,00,00 | Rs.30,00,00 |
|  | 0 | 0 |
| Total | Rs.21,80,00 | Rs.26,00,00 |
| Costs | 0 | 0 |

You are required to determine:

1. Contribution/Sales ratio of the firm
2. Annual Fixed Cots
3. Break-Even Sales
4. Margin of Safety as Percentage of Sales
(b) Define Marginal Costing. State its characteristics.
Q. 5 (a) A company producing 24,000 units provide you the following information:

| Particulars | Rs. |
| :--- | ---: |
| Direct Material | $1,20,00$ |
|  | 0 |
| Direct Wages | 84,000 |
| Variable Overhead | 48,000 |
| Semi-Variable Overhead | 28,000 |
| Fixed Overhead | 80,000 |
| Total Cost | $3,60,00$ |
|  | 0 |

The product is sold at Rs. 20 per unit. The management proposes to increase the production by 3,000 units for sales in the foreign market. It is estimated that the semi-variable overheads will increase by Rs. 1,000 . But the product will be sold at Rs. 14 per unit in the foreign market. However, no additional capital expenditure will be incurred. The management seeks your advice as a cost accountant. What will you advise them?
(b) Give the Cost unit for the following industries: 1. Cement 2. Petroleum 3. Soft Drink 4. Hospital 5. Transport 6. Cotton 7. Hotel 8. Education 9. Carpets 10. Timber 11. Paper 12. Gas 13.Building Construction 14. Interior Decoration

## OR

Q. 5 (a) A company has three production department and two service 07 departments. Distribution summary of overheads is as follows:

| Production Department | Service Department |  |
| :--- | :--- | :---: |
| A-Rs.3,000, B-Rs.2,000 and C-Rs.1,000 | I-Rs.234 and II- |  |

The expenses of service departments are charged on percentage basis which is as follows:

| Service Department | A | B | C | I | II |
| :---: | :--- | :--- | :--- | :--- | :--- |
| I | $20 \%$ | $40 \%$ | $30 \%$ | - | $10 \%$ |
| II | $40 \%$ | $20 \%$ | $20 \%$ | $20 \%$ | - |

Find out the total overheads of production departments using: a) Simultaneous Equation Method and b)Repeated Distribution Method
(b) Explain the objectives and salient features of Statutory Cost Audit in $\mathbf{0 7}$ India.

