CO 5501- COST ACCOUNTING

Date: 12-04-2019 $\square$ Max. : 100 Marks

## SECTION -A

Answer any FOUR questions
(4x10= 40 Marks)

1. Explain the scope and objectives of cost accounting.
2. What are the principles of a good wage payment system?
3. Write note on wastage, scrap, normal loss, abnormal loss, and abnormal gain. How are they treated in process account?
4. From the following information calculate (a). Economic order quantity, (b). Reorder level, (c) Maximum level (d) Minimum level and (e) average stock level Normal usage 150 units per day. Minimum usage 100 units per day. Maximum usage 200 units per day. Reorder period 50 to 60 days. The annual usage is 50,000 units. The cost of purchase is Rs. 100 per order. Cost per unit is Re.1.00. Carrying cost is $10 \%$ per annum.
5. Calculateearnings of a worker from the following particulars;under:
a) Time rate system
b) Piece wage rate
c) Halsey plan
d) Rowan plan

Wage rate Rs. 2 per hour, Production time required for per unit - 15 minutes, Dearness allowance Rs.1.00 per hour, Standard time fixed - 80 hours, Actual time taken -50 hours, Production 250 units
6. Work out machine hour rate for the following machine whose scrap value is nil

1) Cost of machine Rs. 360000
2) Freight and installation Rs. 40000
3) Working life 20 years
4) Working hours - 8000 per year
5) Repairs charge $-50 \%$ of depreciation
6) Power- 10 units per hour @ 10paise per unit
7) Lubricating oil @Rs. 2 per day of 8 hours
8) Consumable stores @ Rs. 10 per day of 8 hours
9) Wages of operator @ Rs. 4 per day.
7. The accounts of machine manufacturing company disclose the following information for six months ending $31^{\text {st }}$ December 2018. Material used Rs.1,50,000. Direct wages Rs.1,20,000. Factory overheads -Rs.30,000. Administrative expenses Rs.15,000. Prepare cost sheet for the half year and calculate the price which the company should quote for the manufacture of a machine requiring materials valued at Rs. 1250 and expenditure in productive wages Rs. 750 , so that the price might yield a profit of $20 \%$ on the selling price.
8. Compute cost per running kilometer from the following date of a truck. Estimated life of vehicle 100000 kms . Annual running 15000 kms .
9. Cost of vehicle

Rs. 25000.00
2. Load licence (Annual)

Rs 750.00
3. Insurance (Annual)

Rs 700.00
4. Garage rent (Annual)

Rs 900.00
5. Supervision and salaries (Annual) Rs 2700.00
6. Drivers' wages per hour

Rs. 3.00
7. Cost of fuel per litre

Rs.3.00
8. Repairs and maintenance per km Rs. 1.75
9. Tyre allocation per km

Rs.0.90.
Charge interest at $5 \%$ per annum on cost of vehicle. The vehicle runs 20 kms . per hour on average and one litre of fuel give 20 km

## SECTION - B

Answer any THREEquestions
( $3 \times 20=60$ Marks)
9. Explain the different methods of apportionment of overheads.

10 . What are the requisites of a good costing system?
11. The following figures are available from financial accounts for the year ending $31^{\text {st }}$ March 2019.

| Particulars | Amount <br> (Rs.) | Particulars | Amount <br> (Rs.) |
| :--- | ---: | :--- | ---: |
| To Opening stock (500 units) | 17,500 | By Sales (10250 units) | $7,17,500$ |
| To Materials | $2,60,000$ | By Closing stock (250 units) | 12,500 |
| To Wages | $1,50,000$ |  |  |
| To Gross Profit c/d | $3,02,500$ |  |  |
|  | $\mathbf{7 , 3 0 , 0 0 0}$ |  | $\mathbf{7 , 3 0 , 0 0 0}$ |
| To Factory expenses | 94,750 | By Gross profit b/d | $3,02,500$ |
| To Administration expenses | $1,06,000$ | By Interest received | 250 |
| To Selling expenses | 55,000 | By Rent received | 10,000 |
| To Bad debts | 4,000 |  |  |
| To Preliminary expenses | 5,000 |  |  |
| To Net profit c/d | 48,000 |  | $\mathbf{3 , 1 2 , 7 5 0}$ |
|  | $\mathbf{3 , 1 2 , 7 5 0}$ |  |  |

The cost sheet shows the cost of materials at Rs. 26 per unit and the labour cost as Rs. 15 per unit.
Factory overheads are absorbed at $60 \%$ of labout cost and administration overheads at $20 \%$ of work
cost. Selling expenses are charged at Rs. 6 per unit. The opening stock of finished goods is valued at Rs. 45 per unit. You are required to prepare:

1) A statement showing cost and profit as per cost accounts:
2) A Statement showing the reconciliation of profit disclosed in cost accounts with the profit shown in financial accounts.
12. The product of a company passes through three distinct processes to completion. They are known as

A, B, and C. From past experience it is ascertained that loss is incurred in each process as follow:
a. Process C- $10 \%$
b. Process B-5\%
c. Process $\mathrm{A}-2 \%$

In each case the percent of loss is computed on the number of units entering the process concerned. The loss of each process possesses a scrap value. The loss of processes A and B is sold at Rs. 5 per hundred units and that of process $C$ at twenty rupees per 100 units.

| Particulars | Process - A (Rs.) | Process - B <br> (Rs.) | Process-C <br> (Rs.) |
| :--- | :---: | :---: | :---: |
| Materials consumed | 8000 | 6000 | 3000 |
| Direct Labour | 6000 | 4000 | 2000 |
| Manufacturing Expenses | 1000 | 1000 | 1500 |

20,000 units have been issued to process A at a cost Re. 0.50 each. The output of process has been as under. Process A - 19,500 units, Process B $-18,800$ units Process C $-16,000$ units. There is no work in - progress in any process. Prepare process accounts.
13. Sun Manufacturing Ltd, have three production departments A, B, and C and two service departments X and Y , the following details pertaining to which are as under:

| Particulars | A | B | C | X | Y |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Floor space (Sq. feet) | 20000 | 25000 | 30000 | 20000 | 5000 |
| H.P of machine | 60 | 30 | 50 | 10 | - |
| Light points | 100 | 150 | 200 | 100 | 50 |
| Value of machine Rs. | 600000 | 800000 | 1000000 | 50000 | 50000 |
| Direct wages Rs. | 30000 | 20000 | 30000 | 15000 | 5000 |
| Working hours | 3070 | 4475 | 2419 | - | - |

The following figures extracted from the accounting records are relevant.
Rent Rs.15000; General lighting Rs.6600; Indirect wages Rs.10000; Power Rs.15000; Depreciation on machines Rs. 100000 and Sundries Rs. 20000.

The expenses of service departments are allocated as under:

|  | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{X}$ | $\mathbf{Y}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Y | $40 \%$ | $20 \%$ | $30 \%$ | $10 \%$ | - |
| X | $20 \%$ | $30 \%$ | $40 \%$ | - | $10 \%$ |

Calculate overhead charges recovery per hour.
14. From the following particulars, prepare stores ledger by adopting FIFO method and weighted average method of pricing of material issues

| Date | Receipts | Issues |
| ---: | :--- | :--- |
| 2019 May 1 | 300 tons at Rs.10 per ton |  |
| 10 | 200 tons at Rs.12 per ton |  |
| 12 | 400 tons at Rs.11 per ton | 250 tons |
| 15 |  | 150 tons |
| 16 |  |  |
| 18 | 200 tons at Rs.14 per ton | 300 tons |
| 20 |  |  |
| 22 | 300 tons at Rs.15 per ton | 200 tons |
| 25 | 100 tones at Rs.16 per ton | 100 tons |
| 27 |  |  |
| 31 |  |  |

