STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 600086.
(For candidates admitted during the academic year 2019-20 and thereafter)
SUBJECT CODE: 19CM/MC/CT24
B.Com. DEGREE EXAMINATION APRIL 2021

COMMERCE
FIRST SEMESTER
COURSE : MAJOR - CORE
PAPER : COST ACCOUNTING
TIME : 90 MINUTES
MAX. MARKS: 50

## SECTION -A

Answer all the Questions

1. What is Activity Based Costing?
2. From the following data given by the personnel department, calculate the labour turnover rate by applying - (a) Separation Method (b) Replacement Method and (c) Flux Method.

Number of workers on the pay-roll:
At the beginning of the month 900
At the end of the month 1100
3. The average annual consumption of material Rs. 20,000 at a price of Rs. 2 per kg. The storage cost is $16 \%$ on average inventory and the cost of placing one order is Rs.50. How much is to be purchased at a time?

## SECTION -B

Answer any Three Questions
(3x8=24)
4. A Product passes through 3 process. In each process $2 \%$ of the gross weight is lost and $10 \%$ is scrap which realises Rs. 100 per quintal in case of Process A and B and Rs. 200 per quintal in case of Process C.

| Particulars | A | B | C |
| :--- | :---: | :---: | :--- |
| Material | 8,000 quintal @ <br> Rs.500 per quintal | 1000 quintal @ <br> Rs.200 per quintal | 900 quintal @ <br> Rs.650 per quintal |
| Labour | 50,000 | 25,000 | 20,000 |
| Direct Expenses | 20,500 | 10,800 | 17,200 |
| General expenses <br> related to material | 7,000 | 1,500 | 4,300 |
| Cost of Tins | - | 10,750 | - |
| Packing of Tins | - | - | 4,500 |

Indirect expenses are Rs.5,000 which are to be apportioned to all the three process in the ratio of combined cost of material and wages. Prepare Process Accounts and cost per unit under each process.
5. The costing records of a company having three production departments and three service departments show the following data for the year ended 31st December, 2019.

| Particulars | Production Departments |  |  | Service Departments |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathrm{P}_{1}$ | $\mathrm{P}_{2}$ | $\mathrm{P}_{3}$ | $\mathrm{~S}_{1}$ | $\mathrm{~S}_{2}$ | $\mathrm{~S}_{3}$ |
| Direct Materials <br> (Rs.) | 9,000 | 10,500 | 7,500 | 1,500 | 3,000 | 4,500 |
| Direct Wages (Rs.) | 15,000 | 12,000 | 16,000 | 4,000 | 2,000 | 1,000 |
| Floor Space (Sq. ft.) | 2,400 | 1,800 | 1,200 | 1,200 | 600 | 600 |
| Light Points (No.) | 40 | 20 | 30 | 20 | 10 | 15 |
| Electricity (KWH) | 4,000 | 3,500 | 2,500 | 500 | 1,500 | 1,000 |
| No. of Employees | 70 | 50 | 30 | 10 | 30 | 10 |
| Value of Machines | 60,000 | $1,50,000$ | 80,000 | 10,000 | 5,000 | 20,000 |
| (Rs.) |  |  |  |  | 20,000 | - |
| Value of Stock (Rs.) | 40,000 | 60,000 | 30,000 | - |  |  |

The expenses incurred during the year were : Fire Insurance Rs. 3,000, Canteen expenses Rs.6,000, Stores expenses Rs.7,200, General Electricity Rs.5,400, Motive Power Rs.10,400, Rent Rs.15,600, General Overhead Rs.5,000 Depreciation on Machines Rs.13,000, Repairs and Maintenance Rs.6,500.
Apportion the costs of the service departments to the production departments using Step Ladder Method :

| Service Departments | \% of services rendered |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{P}_{1}$ | $\mathrm{P}_{2}$ | $\mathrm{P}_{3}$ | $\mathrm{~S}_{1}$ | $\mathrm{~S}_{2}$ | $\mathrm{~S}_{3}$ |
| $\mathrm{~S}_{1}$ | 40 | 30 | 20 | - | - | 10 |
| $\mathrm{~S}_{2}$ | 10 | 20 | 40 | 10 | - | 20 |
| $\mathrm{~S}_{3}$ | 30 | 40 | 30 | - | - | - |

6. An operator engaged in machining certain components receives an ordinary day rate of Rs. 160 per day of 8 hours. The standard output for machining the components has been fixed at Rs. 0.80 per hour (time fixed for premium bonus). On a certain day the output of the worker on this machine is 800 . Find labour
cost per 100 pieces and the wages that would have been actually earned by the workman under the following:
a. If a bonus of Rs. 19.00 is paid per 100 of extra output.
b. If paid for on straight piece work basis at the standard rate.
c. If Halsey Premium Bonus System is in use.
7. The following particulars have been extracted in respect of material X. Prepare ledger account showing the receipts and issues, pricing the materials issued on the basis of Simple Method.
Receipts:
$3^{\text {rd }}$ October purchased 500 units at Rs 4 per unit
$13^{\text {th }}$ October purchased 900 units at Rs 4.30 per unit
$17^{\text {th }}$ October purchased 500 units at Rs 4.50 per unit
$23^{\text {rd }}$ October purchased 600 units at Rs 3.80 per unit
Issues:
$5^{\text {th }}$ October issued 400 units
$15^{\text {th }}$ October issued 400 units
$25^{\text {th }}$ October issued 600 units
$27^{\text {th }}$ October issued 300 units

## SECTION -C

Answer any One Question
( $1 \times 20=20$ )
8. a. The following is an extract of the record of receipts and issues of Sulphur in a chemical factory during February 2017.
February 1 Opening Balance 500 tonnes @Rs 200.
February 3 Issue: 70 tonnes
February 4 Issue: 100 tonnes
February 8 Issue: 80 tonnes
February 13 Received from supplier 200 tonnes @ Rs. 190
February 14 Returned from Department 15 tonnes
February 16 Issue: 180 tonnes
February 20 Received from supplier 240 tonnes @ 190
February 24 Issue: 300 tonnes
February 25 Received from supplier 320 tonnes @ 190
February 26 Issue: 115 tonnes
February 27 Returned from Department 35 tonnes
February 28 Received from supplier 100 tonnes @ 190
Issues are to be priced on the principal of 'First in First out'. The stock verifier of the factory had found shortage of 10 tonnes on the $22^{\text {nd }}$ and left a note accordingly. Draw up price Stores Ledger for the material showing above transaction.
b. From the following particulars, calculate the earnings of workers $\mathrm{A}, \mathrm{B}$ and C under straight piece rate system and Taylor's differential piece rate system.
Standard time allowed - 10 units per hour
Normal time rate per hour - Re. 1
Differential to be applied
$80 \%$ of piece rate when below standard
$120 \%$ of piece rate at or above standard
In a day of 8 hours A produced 75 units, B produced 100 units and C produced 85 units.
9. From the following data prepare a cost and profit statement of Popular Stores Manufacturing Company for the year 2019:
Stock of Materials on 1.1.2019-Rs. 35,000
Stock of materials on 31.12.2019-Rs. 4,900
Establishment expenses- Rs. 10,000
Completed Stock in hand on 1.1.2019 -NIL
Purchase of materials -Rs 52,500
Direct Wages - Rs 95,000
Factory expenses -Rs 17,000
Completed Stock in hand on 31/12/2019-Rs. 35,000
Sales- Rs. 1,89,000
The number of stoves manufactured during the year 2019 was Rs 4,000
The company wants to quote for a contract for the supply of 1000 Electric Stoves during the year 2020. The Stoves to be quoted are of uniform quality and make and similar to those manufactured in the previous year; but cost of material has increased by $15 \%$ and cost of factory labour by $10 \%$.
Prepare a statement showing the price to be quoted to give the same percentage of net profit on turnover as was realized during the year 2019, assuming that the cost per unit of overheads will be the same as in the previous year.

