## LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600034

## B.Com. DEGREE EXAMINATION - COMMERCE

## FOURTH SEMESTER - APRIL 2023

UCO 4501 - COST ACCOUNTING

Date: 02-05-2023
Time: 09:00 AM - 12:00 NOON
Max. : 100 Marks

SECTION A - K1 (CO1)
Answer ALL the Questions
( $10 \times 1=10$ )

1. Multiple Choice Questions
a) Which cost is incurred even if the company is closed?
(i) Sunk cost
(ii) Historical cost
(iii) Imputed cost
(iv) Shut-down cost
b) Which is considered to be the normal loss of materials?
(i) Loss due to accidents
(ii) Pilferage
(iii) Careless handling of materials (iv) Loss due to breaking the bulk
c) Labour turnover is measured by?
(i) Number of persons replaced/ average number of workers
(ii) Numbers of persons separated / Number of workers at the beginning of the year
(iii) (Number of persons replaced + Number of persons separated)/(Number of persons at the beginning + Number of persons at the end of the year)
(iv) Number of persons replaced / Number of workers at the end
d) Employee cost includes?
(i) Wages and salaries.
(ii) Allowances and incentives
(iii) Payment for overtime.
(iv) All of the above
e) In activity based costing, costs are accumulated by activity using?
(i) Cost drivers
(ii) Cost objects
(iii) Cost pools
(iv) Cost benefit analysis

## 2. Fill in the Blanks

a) The total of all direct costs is $\qquad$ cost.
b) The system of costing for jobs of diverse nature is $\qquad$
c) Bonus under Halsey plan is paid at ___ \% of time saved.
d) Power cost is apportioned on the basis of ___ hours.
e) ___ profit is the basis for computing profits on incomplete contracts.

SECTION A - K2 (CO1)
Answer ALL the Questions
( $10 \times 1=$
10)
3. Match the Following
a) Primary packing cost is a part of $\quad$ (i) Inventory control technique
b) Salary paid to plant supervisor is a part of
(ii) Transfer pricing
c) Batch costing is a type of
(iii) Production cost
d) ABC Analysis is
(iv) Factory overheads
e) Interprocess profits are an example of
(v) Job costing
4. True or False
a) Expenses that are exclusively shown in the financial accounts are added back to financial profit in the reconciliation statement.
b) Employee cost does not include incentives and overtime payment.
c) In cost sheet preparation, costs are classified on the basis of functions.
d) Abnormal loss should not be allowed to affect the cost of good units.
e) Prime cost includes direct materials, direct wages and indirect expenses.

SECTION B - K3 (CO2)

|  | Answer any TWO of th 20) |  |  |
| :---: | :---: | :---: | :---: |
| 5. | Calculate Reorder level, Minimum stock level, Maximum stock level and Average stock level of X and Y from the following information: |  |  |
|  |  | X | Y |
|  | Normal usage week | 300 units per week | 400 units per week |
|  | Maximum usage | 450 units per week | 500 units per week |
|  | Minimum usage | 150 units per week | 250 units per week |
|  | Reorder period | 4 to 6 weeks | 2 to 4 weeks |
|  | Reorder quantity | 2400 units | 3000 units |

6. From the following particulars, calculate earnings of a worker under:
a) Time rate system
b) Piece wage rate
c) Halsey plan
d) Rowan plan

Wage rate - Rs. 2 per hour
Production per hour -4 units
Dearness allowance - Re. 1 per hour
Standard time fixed - 80 hours
Actual time taken - 50 hours
Production - 250 units
7. Mr. X owns a fleet of trucks. His records for the year 2020 contains the following details:

| No. of trucks | 10 |
| :--- | ---: |
| Life of each truck in kms | $2,00,000$ |
| Monthly distance run by a truck in kms | 5,000 |
| Average empty running p.m. | $20 \%$ |
| Fuel usage - 1 litre for every 20 kms | Rs. |
|  | $1,20,000$ |
| Cost of truck | 20,000 |
| Scrap value at the end of life | 2,000 |
| Manager's salary per month | 1,500 |
| Accountant's salary per month | 700 |
| Driver's salary per truck per month | 400 |
| Cleaner's salary per truck per month | 500 |
| Salary of 3 mechanics common for all trucks each per month | 12,000 |
| Garage expenses for 10 trucks p.a. | 1,200 |
| Insurance at 2.4\% on cost of truck p.a. | 10 |
| Road tax per truck p.a. | 0.40 |
| Price of petrol per litre |  |
| Lubricants, tyres and repairs per km |  |

Compute cost per effective running km .
8. From the following information, prepare a cost sheet for the month of December 2019.

| Stock on hand $-1^{\text {st }}$ December 2019: | Rs |
| :---: | :---: |
| Raw materials | 25,000 |
| Finished Goods | 17,300 |
| Stock on hand - 31 $1^{\text {st }}$ December 2019: |  |
| Raw materials | 26,200 |


|  | Finished Goods <br> Purchase of Raw Materials <br> Carriage on purchases <br> Work in Progress $1^{\text {st }}$ December 2019 at works cost <br> Work in Progress $31^{\text {st }}$ December 2019 at works cost <br> Sale of finished goods <br> Direct wages <br> Non-productive wages <br> Direct Expenses <br> Factory overheads <br> Administration overheads <br> Selling and distribution overheads | 15,700 21,900 1,100 8,200 9,100 72,300 17,200 800 1,200 8,300 3,200 4,200 |  |
| :---: | :---: | :---: | :---: |
| SECTION C - K4 (CO3) |  |  |  |
|  | Answer any TWO of the following | ( $2 \times 10=20$ ) |  |
| 9. | (i) From the following particulars prepare a statement showing the labour cost per man-day of 8 hours. <br> a) Basic salary - Rs. 2 per day <br> b) Dearness allowance -25 ps for every point over 100 (cost of living index for working class) current cost of living index is 700 points <br> c) Leave salary - $10 \%$ of (a) and (b) <br> d) Employer's contribution to PF-8\% of (a), (b) and (c) <br> e) Employer's contribution to state insurance $-2.5 \%$ of (a), (b) and (c) <br> f) Expenditures on amenities to labour Rs. 20 per head per mensem <br> g) Number of working days in a month -25 days of 8 hours each. <br> (ii) Calculate the earnings of 3 workers $\mathrm{A}, \mathrm{B}$ and C under Merrick's Multiple piece rate system from the following: <br> Standard production per day: 150 units <br> Normal piece rate: Rs. 0.50 per unit <br> Production of workers on a particular day: <br> A 120 units, B 140 units and C 160 units. |  |  |
| 10. | Ascertain the profit as per the financial books from the following information: |  |  |
|  | Profit as per cost accounts Closing stock over valued in cost books Preliminary expenses written off Profit on sale of building Admin expenses over recovered in cost books Works overhead under recovered in cost books Bank interest and transfer fee in financial books Interest on investment recorded in financial books Depreciation shown in excess in cost books Provision made for income tax | $\begin{array}{r} \text { Rs. } \\ 25,000 \\ 12,500 \\ 3,000 \\ 30,000 \\ 50,375 \\ 30,375 \\ 5,000 \\ 10,000 \\ 4,000 \\ 40,000 \\ \hline \end{array}$ |  |
| 11. | 'A 'undertook several large contracts and his ledger contained therefore a separate account for each contract. On 31.12.2018 the account of contract number 22 showed the following amounts as expended thereon. |  |  |

Proph Rs 1,00,000
Proportionate establishment charges Rs 54,000
The contract was for Rs $15,00,000$ and up to $31-12-2018$ Rs $6,00,000$ had been received in cash which represented $80 \%$ of work certified.
The material at site unconsumed were valued at Rs 15,000 . The contract plant was to be depreciated by Rs 16,000 .
Prepare the contract showing what profits thereon have been earned to date.
12. Compute the machine hour rate from the following data:

|  | Rs |
| :--- | ---: |
| Cost of Machine | $1,00,000$ |
| Installation Charges | 10,000 |
| Estimated Scrap value after the expiry of life (15 Years ) | 5,000 |
| Rent and rates for the shop per month | 200 |
| General lighting for the shop per month | 300 |
| Insurance premium for the machine per annum | 960 |
| Repairs and maintenance per annum | 1000 |
| Power consumption - 10 units per hour | - |
| Rate of power per 100 units | 20 |
| Estimated working hours per annum (This include | 2200 |
| setting up time of 200 hours) | 600 |
| Shop supervisors salary per month |  |

The machine occupies $1 / 4^{\text {th }}$ of the total area. The supervisor is expected to devote $1 / 5^{\text {th }}$ share of his time for supervising the machine.

> SECTION D - K5 (CO4)

Answer any ONE of the following
13. From the following transactions prepare separately stores ledger account using (i) FIFO and (ii) LIFO Methods.

| Jan | 1 | Opening Balance |
| ---: | :--- | :--- |
| 5 | Received | 100 units @Rs. 5 each |
| 20 | Issued | 500 units @Rs. 6 each |
| Feb | 5 | Issued |
| 6 | Received back from work order issued on |  |
|  | $5^{\text {th }}$ February |  |
| 7 | Received | 10 units |
| 20 | Issued | 600 units @Rs. 5 each |
| 23 | Returned to supplier | 300 units |
| 26 | Issued | 50 units purchased on $7^{\text {th }}$ Feb |
| Mar 10 | Received | 200 units |
| 12 | Issued | 500 units @Rs. 7 each |

14. Star Ltd. has 3 production departments A, B and C and 2 service departments X and Y . The following particulars are available for the month of March 2020 concerning the organization.

|  | Rs. |
| :--- | ---: |
| Rent | 15,000 |
| Municipal taxes | 5,000 |
| Electricity | 2,400 |


| Indirect wages | 6,000 |
| :--- | ---: |
| Power | 6,000 |
| Depreciation on machinery | 40,000 |
| Canteen expenses | 30,000 |
| Other labour related costs | 10,000 |
|  | $1,14,400$ |

The following further details are also available:

| Particulars | Total | A | B | C | X | Y |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Floor space Sq. mts. | 5000 | 1000 | 1250 | 1500 | 1000 | 250 |
| Light points | 240 | 40 | 60 | 80 | 40 | 20 |
| Direct wages Rs. | 40000 | 12000 | 8000 | 12000 | 6000 | 2000 |
| HP of machines | 150 | 60 | 30 | 50 | 10 | - |
| Cost of machines Rs | 200000 | 48000 | 64000 | 80000 | 4000 | 4000 |

The expenses of service departments are to be allocated in the following manner:

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

You are required to calculate the total overhead of the 3 production departments.
SECTION E - K6 (CO5)
Answer any ONE of the following
( $1 \times 20=20$ )
15. The accounts of a machine manufacturing company disclose the following information for 6 months ending $31^{\text {st }}$ dec 2012.
Materials used
1,50,000
Direct wages
1,20,000
Factory overheads
30,000
Admin., expenses
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.
16. A Product passes through three processes I, II, and III. From the following information prepare the process accounts assuming that there were no opening or closing stocks.

|  | Process I (Rs) | Process II (Rs) | Process III (Rs) |
| :--- | ---: | ---: | ---: |
| Materials | 1,000 | 1,500 | 500 |
| Labour | 5,000 | 8,000 | 6,500 |
| Overheads | 1,050 | 1,188 | 2,009 |
| Actual output (units) | 9,500 | 9,100 | 8,100 |
| Normal loss | $3 \%$ | $5 \%$ | $8 \%$ |

The wastage of process I was sold at Rs 25 paise per unit, that of process II at Rs 50 paise per unit and that of process III at Re. 1 per unit.
Raw materials of 10,000 units were introduced into process I in the beginning at a cost of Re. 1 per unit.

