# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600034 

## B.Com. DEGREE EXAMINATION - COMMERCE <br> FIFTH SEMESTER - APRIL 2010

CO 5501-COST ACCOUNTING

Date \& Time: 27/04/2010 / 1:00-4:00

Dept. No.

Max. : 100 Marks

## PART - A

ANSWER ALL QUESTIONS
( $\mathbf{1 0} \times 2=20$ MARKS)

1. What are the elements of cost?
2. How do you value the closing stock of finished goods?
3. What is Bincard?
4. Write a short note on spoilage.
5. A transport service company is running four buses between two towns which are 50 kms . Apart, seating capacity of each bus is 40 passengers. Actual passengers carried were $75 \%$ of the seating capacity. All the four buses ran on all the days of the month. Each bus made one round trip per day. Calculate the total kms and total passengers kms for the month.
6. About 50 items are required every day for a machine. A fixed cost of Rs. 50 per order is incurred for placing an order. The inventory carrying cost per item amounts to Re. o. 20 per day. Compute EOQ.
7. Calculate the labour turnover rate by applying a) separation method and b) replacement method.

No. of workers on the payroll:
At the beginning of the month 900
At the end of the month $\quad 1,100$
During the month 10 workers left; 40 workers were discharged and 150 workers were recruited. Of these, 25 workers are recruited in the vacancies of those leaving while the rest were engaged for an expansion scheme.
8. Find out the amount of rent apportioned to each department:

Rent : Rs. 8,000; space occupied by departments: A -100 sq. feet; B -200 sq. feet; c - 300 sq. feet; D - 400 sq.feet.
9. What is Machine hour rate? How is it computed?
10. Calculate the cost of Sales of Job no. 618: Works cost Rs. 6,000; office on cost $10 \%$ of works cost; selling overhead $5 \%$ of works cost.

## PART - B

## ANSWER ANY FIVE QUESTIONS $\left(\begin{array}{llll}5 & x & 8 & =40\end{array}\right.$ MARKS)

11. Prepare the cost sheet to show the total cost of production and cost per unit of goods manufactured by a company for the month of June 2009.

Rs.

| Stock of Raw material (1.6.2009) | 3,000 |
| :--- | ---: |
| Raw material purchased | 28,000 |
| Stock of Raw materials, (31.6.2009) | 4,500 |
| Manufacturing wages | 7,000 |
| Depreciation on plant | 1,500 |
| Loss on sale of a part of plant | 300 |
| Factory rent and rates | 3,000 |
| Other rent | 500 |
| General expenses | 400 |
| Discount on sales | 300 |
| Advertisement expenses to be charged | 600 |
| Income tax paid | 2,000 |
| Sales | 50,000 |

The number of units produced during June was 3,000.
The stock of finished goods was 200 and 400 units on 1-6-2009 and 31-6-2009 respectively. The total cost of the units on hand on 1-7-2009 was Rs. 2,800. All these had been sold during the month.
12. The components $A$ and $B$ are used as follows:

Normal usage 50 units per week each
Minimum usage 25 units per week each
Maximum usage 75 units per week each
Re-order quantity A : 300 units
B : 500 units
Re-order period A : 4 to 6 weeks
B : 2 to 4 weeks
Calculate for each component:
a) Re-order level, b) Minimum level, c) Maximum stock level and d) Average stock level.
13. Prepare a stores ledger, assuming that the issue of materials is priced on the 'Weighted' average method. Following is the record of receipts and issue of a certain material in a factory during a week.

April 1 Opening balance 50 tons @ Rs. 10 per ton.
3 Issued 30 tons
4 Received 60 tons @ Rs. 10.125 per ton
5 Issued 25 tons (stock verification reveals loss of one ton).
6 Received back from complete work order 10 tons
(Previously issued @ 10.00 per ton)
7 Issued 40 tons
14. During first week of April 2009, the workman Mr. X manufactured 300 articles. He receives wages for a guaranteed 48 hours week at the rate of Rs. 4 per hour. The
estimated time to produce one article is 10 minutes and under incentive scheme the time allowed is increased by $20 \%$. Calculate his gross wages according to:
a) piece work with a guaranteed weekly wage b) Rowan premium bonus c) Halsey premium bonus .
15. Prepare a statement showing the cost per manday of eight hours:
a) Basic salary and dearness allowance Rs. 300 per month
b) Leave salary to the workman 6 percent of the basic and D.A.
c) Employer's contribution to Provident fund: 6\% of a) plus b)
d) Pro-rata expenditure on amenities to labour Rs. 25 per head per month
e) Number of working hours in a month 200.
16. Jaidka owns fleet of taxis and the following informations are available from the records maintained by him.
Number of taxis 10
Cost of each taxi
Rs. 20,000
Salary of manager
Rs. 600 p.m.
Salary of accountant
Rs. 500 p.m.
Salary of cleaner
Rs. 200 p.m.
Salary of mechanic
Rs. 400 p.m.
Garage rent
Insurance premium
Annual tax
Driver's salary
Rs. 600 p.m.
5\% per annum
Rs. 600 per taxi
Rs. 200 p.m. per taxi
Annual repair
Rs. 1,000 per taxi.
Total life of a taxi is about $2,00,000 \mathrm{kms}$. A taxi runs in all $3,000 \mathrm{kms}$ in a month of which $30 \%$ it runs empty. Petrol consumption is 1 litre for 10 kms , @ Rs. 1.80 per litre. Oil and other sundries are Rs. 5.00 per 100 kms .
Calculate the cost of running a taxi per km .
17. The product of a manufacturing concern passes through two processes A and B and then to finished stock. It is ascertained that in each process normally $5 \%$ of the total weight is lost and $10 \%$ is scrap which from Processes A and B realizes Rs. 80 per ton and Rs. 200 ton respectively.

The following are the figures relating to both the processes:
Process A
Process B

| Materials in tons | 1,000 | 70 |
| :--- | ---: | ---: |
| Cost of materials per ton in rupees | 125 | 200 |
| Wages in rupees | 28,000 | 10,000 |
| Manufacturing expenses in rupees | 8,000 | 5,250 |
| Output in tons | 830 | 780 |

Prepare Process cost accounts showing cost per ton of each process. There was no stock or work-in-progress in any process.
18. Prepare a reconciliation statement from the following details:

Net loss as per costing records 1,72,400
Works overhead under recovered in costing 3,120
Administrative overhead in excess 1,700
Depreciation charged in financial accounts 11,200
Depreciation recovered in cost accounts 12,500
Interest received not included in costing 8,000
Obsolescence loss charged in financial records 5,700

| Income tax provided in financial books | 40,300 |
| :--- | ---: |
| Bank interest credited in financial books | 750 |
| Stores adjustments credited in financial books | 475 |
| Value of opening stock in - cost accounts | 52,600 |
| Financial books | 54,000 |
| Value of closing stock in - cost accounts | 52,000 |
| Financial books |  |

## PART - C

## ANSWER ANY TWO QUESTIONS MARKS)

19. The following particulars are extracted from the books of a building contractor on 31-12-2009.

|  | Rs. |
| :--- | ---: |
| Materials | 80,000 |
| Purchased | $2,00,000$ |
| Transfer from other contracts | $5,50,000$ |
| Issued from central stores | $8,75,000$ |
| Wages | 35,000 |
| Indirect expenses | 15,000 |
| Inspection fees | 40,000 |
| General stores | 66,000 |
| Establishment charges | 6,000 |

A cement mixing plant was purchased on 1st Jan 2009 for Rs. 80,000 and installation charges amounted to Rs. 20,000 . Of the plant and material charged to the contract, plant which cost Rs. 3,000 and material which cost Rs. 2,500 were lost. On June $30^{\text {th }}$ plant was transferred to another contract. An additional plant was purchased on October 1, for Rs. 2,00,000. Of the materials charged to contract, materials which cost Rs. 5,000 were sold for Rs. 5,500.

The contract price was Rs. 50 lakhs. Cash received on account till $31^{\text {st }}$ Dec. 2009 amounted to Rs. 20 lakhs being $80 \%$ of work certified. The cost of work done but not certified was Rs. 75,000 . The value of material on hand was Rs. 20,000. Charge depreciation on plant at $10 \%$ per annum. Prepare contract account. Show how work in progress account will appear in the Balance Sheet on $31^{\text {st }}$ Dec. 2009.
20. On August 15, 2009 a manufacturer Soman desired to quote for a contract for the supply of 500 radio sets. From the following details prepare a statement showing the price to be quoted to give the same percentage of net profit on turnover as was realized during 6 months ending on $30^{\text {th }}$ June 2009.

Stock of materials as on $1^{\text {st }}$ Jan 2009
Stock of materials as on $30^{\text {th }}$ June 2009
Purchase of materials during 6 months
Factory wages during 6 months
Indirect charges during 6 months
Opening stock of completed sets
Closing stock of completed sets
Sales during 6 months

Rs.
20,000
25,000
1,50,000
1,20,000
25,000
Nil
100
3,24,000

The number of radio sets manufactured during these six months was 1450 sets including those sold and those stocked at the end of the period. The radios to be quoted are of uniform quality and size as were manufactured during the six months to $30^{\text {th }}$ June 2009. As from August 1 , the cost of factory labour has gone up by $10 \%$
21. Modern manufacturers Ltd. have three production Departments P1, P2, P3 and two Service Departments S1 and S2, the details pertaining to which are as under:


The following figures extracted from accounting records are relevant:

|  | Rs. |  | Rs. |
| :--- | ---: | :--- | ---: |
| Rent and Rates | 5,000 | Power | 1,500 |
| General Lighting | 600 | Depreciation on machines | 10,000 |
| Indirect wages | 1,939 | Sundries | 9,695 |

The expenses of the Service Departments are allocated as under:

|  | P1 | P2 | P3 | S1 | S2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| S1 | $20 \%$ | $30 \%$ | $40 \%$ | - | $10 \%$ |
| S2 | $40 \%$ | $20 \%$ | $30 \%$ | $10 \%$ | - |

Prepare a statement showing distribution of overheads to various Departments.
Prepare a statement of secondary distribution.
Calculate the overhead rate per hour.

