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## LA-104

## April-2014

## F.Y. M.B.A. Sem.-II (Integrated)

## Fundamentals of Cost Accounting

Time : 3 Hours]
[Max. Marks : 100

Instruction : Numbers on right indicate marks.

1. (a) Discuss classification of costs in detail.
(b) The following are the transactions in respect of purchase and issue of components forming part of an assembly of a product manufactured by a firm which requires to update its cost of production, very often for bidding tenders and finalizing cost plus contract.

| $\begin{aligned} & \text { Date } \\ & \text { (2013) } \end{aligned}$ |  | Quantity | Purchase / Issue | Price per Unit |
| :---: | :---: | :---: | :---: | :---: |
| January | 1 | 2500 | Opening Stock | at ₹ 1.10 each |
|  | 5 | 500 | Purchased | at ₹ 1.20 each |
|  | 13 | 1000 | Issued | - |
| February | 2 | 750 | Purchased | at ₹ 1.30 each |
|  | 20 | 1200 | Issued | - |
|  | 25 | 500 | Issued | - |
| March | 10 | 500 | Purchased | at ₹ 1.40 each |
|  | 25 | 750 | Purchased | at ₹ 1.30 each |
|  | 29 | 1000 | Issued | - |

Prepare Stores Ledger Account as per LIFO and weighted average method.

## OR

P.T.O.
(b) The particulars relating to 600 kg of a certain raw material purchased by a company during February were as follows :
(1) Lot prices quoted by supplier and accepted by the company for placing the purchase order.

Lot up to 500 kg @ ₹ 22 per kg.
Between $500-750 \mathrm{~kg}$ @ ₹ 20 per kg.
Between 750 - 1000 kg @ ₹ 18 per kg.
Prices are F.O.R. supplier's factory.
(2) Trade discount $20 \%$.
(3) Additional charge for container @ ₹ 10 per drum of 12.5 kg .
(4) Credit allowed on return of containers @ ₹ 8 per drum.
(5) Sales tax @ $10 \%$ on raw material and $5 \%$ on drum.
(6) Total freight paid by the purchaser ₹ 120.
(7) Insurance at $2.5 \%$ (on net invoice value) paid by purchaser.
(8) Stores overhead applied at 5\% on total purchase cost of material.

The entire quantity was received and issued to production. The containers were returned in due course. Draw up suitable statement to show :
(i) Total cost of material purchased.
(ii) Unit cost of material issued to production.
2. (a) The following information relates to work force in a factory during the year 2012-2013 :

- Number of workers on April 1, 2012-7050
- Number of workers on March 31, 2013-8550
- Number of workers who quit on their own - 600
- Number of workers who availed golden handshake opportunity - 300
- Number of workers employed during 2012-2013 - 2400 (including those 1900 workers employed due to expansion)

Calculate annual labour turnover rate under different method.
(b) Standard time allocated for a job is 40 hours and the rate per hour is $₹ 1$ plus a dearness allowance @ 0.30 paise per hour worked. Actual time taken by a worker is 30 hours.

Calculate earnings under :
(a) Time-wage system
(b) Piece-wage system
(c) Halsey plan
(d) Rowan plan
(c) In a manufacturing company the following particulars have been extracted for the year ended $31^{\text {st }}$ December, 2012 :

| Particulars | Production Department |  | Service Departments |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{P}$ | $\mathbf{Q}$ | $\mathbf{R}$ | $\mathbf{A}$ | $\mathbf{B}$ |
| Direct wages (₹) | 15,000 | 22,500 | 30,000 | 7,500 | 15,000 |
| Direct Materials (₹) | 15,000 | 30,000 | 30,000 | 22,500 | 22,500 |
| Staff Number | 150 | 225 | 225 | 75 | 75 |
| Electricity (kWh) | 6000 | 4500 | 3000 | 1500 | 1500 |
| Asset Value (₹) | 6000 | 4000 | 3000 | 1000 | 1000 |
| Light points | 10 | 16 | 4 | 6 | 4 |
| Area (Square metres) | 150 | 250 | 50 | 50 | 50 |

The expenses for the period were as follows :

|  | $₹$ |  | ₹ |
| :--- | ---: | :--- | ---: |
| Power | 3,300 | Depreciation | 90,000 |
| Lighting | 600 | Repairs | 18,000 |
| Stores overheads | 2,400 | General overheads | 36,000 |
| Welfare to staff | 9,000 | Rent \& Taxes | 1,650 |

Apportion the expenses of service department B according to direct wages and those of service Department A in the ratio $5: 3: 2$ to the production departments only.

## OR

(c) From the following particulars, compute Machine Hour Rate :
P.T.O.

|  | $₹$ |
| :--- | ---: |
| Cost of Machine | 57,400 |
| Installation charges | 2,700 |
| Anticipated life of Machine 10 years. |  |
| Residual value at the end of 10 years | 2,500 |
| Rent \& Rates per annum | 6,000 |
| Insurance of Machine per annum | 1,500 |
| Repairs \& Maintenance per annum | 4,320 |
| Consumable stores per annum | 600 |
| Total production services per annum | 540 |

Power cost is 5 units per working hour @ 20 paise per unit.
Setting up time (Non productive) 200 hrs p.a.
There are 300 working days of eight hours each in a day.
3. (a) Starshine Ltd. supplies the following information and requires to prepare a cost sheet :

|  | $₹$ |
| :--- | ---: |
| Stock of raw materials on $1^{\text {st }}$ September, 2012 | $1,50,000$ |
| Stock of raw materials on $30^{\text {th }}$ September, 2012 | $1,83,000$ |
| Direct wages | $1,05,000$ |
| Indirect wages | 5,500 |
| Sales | $4,00,000$ |
| Work in progress on1st September, 2012 | 56,000 |
| Work in progress on $30^{\text {th }}$ September, 2012 | 70,000 |
| Purchase of raw materials | $1,32,000$ |
| Factory rent, rates and power | 30,000 |
| Depreciation of plants and machinery | 7,000 |
| Expenses on purchases | 3,000 |
| Carriage outwards | 5,000 |
| Advertising | 7,000 |
| Office rent and taxes | 5,000 |
| Traveller's wages and commission | 13,000 |
| Stock of finished goods on1st September, 2012 | $1,08,000$ |
| Stock of finished goods on $30^{\text {th }}$ September, 2012 | 62,000 |

(b) Sunmoon Ltd., a construction company, who prepares his accounts on $31^{\text {st }}$ December each year, commenced a Contract No. 5178 on $1^{\text {st }}$ April, 2013. The costing records concerning the said contract yield the following information at $31^{\text {st }}$ December, 2013 :

Materials - ₹ 64,500
Labour - ₹ $1,50,330$
Foreman - ₹ 18,930

- A machine costing ₹ 45,000 has been on the site for 73 days. Its working life is estimated at 5 years and its final scrap value at ₹ 3,000 .
- A supervisor who is paid ₹ 3,000 per month has devoted approximately onehalf of his time to this contract.
- Administration expenses amounted to ₹ 37,830.
- Materials on hand at site on $31^{\text {st }}$ December, 2013 cost ₹ 7,440.
- $\quad$ The contract price is $₹ 6,00,000$. On 31-12-2013 $2 / 3$ of the contract was completed. Architect's certificates had been issued covering ₹ $3,00,000$.
- ₹ $2,40,000$ has so far been paid on account.

Prepare Contract Account.
4. (a) In a manufacturing concern the output of Process ' A ' is transferred to Process ' B '. Normal loss in process ' $A$ ' and ' $B$ ' is observed to be $5 \%$ and $10 \%$ respectively. The scrap value of normal wastage is ₹ 20 per unit in Process 'A' and ₹ 30 per unit in Process ' B '.

The expenses were as follows :

## Process A Process B

## (₹)

## (₹)

| Materials | 10,000 | 6,000 |
| :--- | ---: | ---: |
| Wages | 9,000 | 2,000 |
| Manufacturing Expenses | 1,000 | 4,000 |

In Process 'A' one thousand units were entered a cost of ₹ 10,000 . The output of Process ' A ' is 900 units and Process ' B ' 750 units.

Prepare Process Accounts, Normal Loss, Abnormal Loss/Gain Account.
(b) Mr. Bean has a contract with his company that he will use his own 4 -wheel car for business journeys and will be reimbursed at a fixed rate per kilometer travelled. After allowing for holidays and time spent in the office, it is estimated that he will make 300 business journeys in the course of a year with the average journey covering 50 kms . Bean has provided the following details :

- $\quad$ The current price of petrol is ₹ 5 per litre and average of vehicle is 25 kms for every litre.
- $\quad$ Repair costs ₹ 10 per 200 kms.
- Tyres will be renewed every 2000 kms . Each type costs ₹ 20.
- Insurance is ₹ 50 per month which the company agrees to pay it in full.
- License is ₹ 500 per year which the company agrees to pay half of the expense.
Calculate the cost per passenger km and takings assuming $10 \%$ profit on takings.

5. (a) Prepare reconciliation statement from following information of Margs Ltd. and find profit as per financial statement from reconciliation statement.
Profit as per cost sheet ₹ 50,000 .

Particulars

Direct Material
Direct Wages
Factory Overhead
Admin. Overhead
Selling \& Distribution Overhead
Opening Stock

## Financial

 StatementsSales of the company during the year amounts to 2,40,000.
(b) Give Journal Entries for the following transactions in the books of "Mehta and Sons", who is following integrated accounting system :

## ₹

(1) Purchase of raw material on credit basis 20,000
(2) Raw material transferred for production

15,000
(3) Payment of Admin. overhead 5,000
(4) Factor overhead under-absorbed 2,000
(5) Sales during the year

3,00,000
(6) Depreciation on Machinery

5,000
(7) Material issued for repairs

3,000
(c) From the following figures, ascertained from costing records and financial books of a factory, you are required to pass necessary entries in the cost journal (assume that a system of maintaining control accounts prevails in the organization).

| Purchases | $1,95,000$ |
| :--- | ---: |
| Carriage Inward | 2,925 |
| Stores issued | $1,79,400$ |
| Productive wages | $1,73,160$ |
| Unproductive wages | 60,840 |
| Works on Cost | $1,74,200$ |
| Materials used in repairs | 1,560 |
| Cost of completed jobs | $6,40,315$ |

