



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		
	P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	S <sub>1</sub>	S <sub>2</sub>	S <sub>3</sub>
Direct Materials (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 (Rs.)	60,000	1,50,000	80,000	10,000	5,000	20,000
Value of Stock (Rs.)	40,000	60,000	30,000	—	20,000	—

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					
	P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	S <sub>1</sub>	S <sub>2</sub>	S <sub>3</sub>
S <sub>1</sub>	40	30	20	—	—	10
S <sub>2</sub>	10	20	40	10	—	20
S <sub>3</sub>	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<sup>rd</sup> October purchased 500 units at Rs 4 per unit
- 13<sup>th</sup> October purchased 900 units at Rs 4.30 per unit
- 17<sup>th</sup> October purchased 500 units at Rs 4.50 per unit
- 23<sup>rd</sup> October purchased 600 units at Rs 3.80 per unit

Issues:

- 5<sup>th</sup> October issued 400 units
- 15<sup>th</sup> October issued 400 units
- 25<sup>th</sup> October issued 600 units
- 27<sup>th</sup> October issued 300 units

### SECTION –C

**Answer any One Question**

**(1x20=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<sup>nd</sup> 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 A, 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 85units.

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.

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