FYBAF/SEM I/CA/12.10.2019

Time: 2 1/2 hrs.

W. Library

Marks:75

(80)

Note:

1. All questions are compulsory with internal options.

2. Figures to the right indicate full marks.

3. Use of simple calculator is allowed.

Q. 1 A. Multiple choice questions (any eight)
1) Flour used in bread is a _____

(a) total (b) direct (c) indirect

2) Under Gantt's task and bonus plan, no bonus is payable to a worker if his efficiency is

less than ______(a) 50% (b) 100% (c) 60%

3) The difference between hours taken and standard time is _____

(a) time saved (b) idle time (c) normal time

4) Wage sheet is prepared by the _____ department.

(a) personnel (b) payroll (c) cost accounting

5) Power is allocated on the basis of ______ of machines.

(a) cost (b) machine hours (c) horse power

6) The wages paid to a carpenter for making a chair is _____ cost.

(a) direct material (b) direct labour (c) overheads

7) Packaging cost is a _____ overhead.

(a)financial (b) selling and distribution (c) administrative

8) When the amount of overhead absorbed is less than the amount of overhead incurred,

it is known as _____ absorption of overhead.

(a) under (b) over (c) appropriate

p) represents the quantity of material which is normally ordered when the materials reach ordering level.

(a) Re-order quantity (b) Minimum quantity (c) Maximum quantity

10) is a document which authorizes and records the issue of material for

(a) Material requisition note (b) Material return note (c) Material transfer note

Q.1 B. State whether the following statements are True or False (any seven)

(07)

1) Variable cost changes according to the level of activity.

2) Allocation and apportionment of overheads mean the same.

3) Valuation of closing stock is same under FIFO and LIFO method.

4) Purchase order is an order to stores department to issue materials.

5) Depreciation of machinery is a standing charge.

6) Time book records time of arrival and departure of each worker.

 Departments that assist production departments indirectly are called service departments.

8) Staff salary is an administrative overhead.

9) Fixed costs vary with volume rather than time.

10) Cost accounting provides only historical data.

Q.2 (A) From the following particulars, prepare stock record by applying FIFO method:

(08)

Date	Transaction	Units	Rate (₹)
01-01-2018	Balance	200	25
06-01-2018	Purchase	160	28
20-01-2018	Sale	150	35
25-01-2018	Sale	100	33
28-01-2018	Purchase	100	26
30-01-2018	Sale	60	28
31-01-2018		50	30

On physical verification on 31-01-2018 it was revealed that there was a deficiency of 15 units.

Q.2 (B) From the following particulars, calculate economic order quantity for Company A and Company B:

B: Particulars	Company A	Company B
Semi annual consumption	1600 units	2500 units
Cost per unit	₹6	₹20
Cost of carrying inventory	25% p.a.	10% p.a.
Cost of placing an order	₹ 150	₹50

(4)

(08)

(08)

- Q.2 (P) A company manufactures 6,000 units of a product per month. The cost of placing an order is ₹ 100. The purchase price of the raw material is ₹ 15 per kilogram. The reorder period is 4 to 8 weeks. The consumption of raw material varies from 150 kilograms to 450 kilograms per week. The average consumption being 300 kilograms. The carrying cost of inventory is 20% per annum.
 - You are required to calculate :

 (i) Re-order quantity
 - (ii) Re-order level
 - (iii) Minimum stock level
 - (iv) Maximum stock level
 - (v) Average stock level
- Q.2 (Q) From the following details calculate the value of closing stock as per weighted average (07) method:

Date Transaction		Units	Rate (₹)	
01-02-2019	Opening stock	1000	20	
03-02-2019	Purchases	800	25	
05-02-2019	Sales	1200		
07-02-2019	Purchases	1600	30	
09-02-2019	Sales	1000		
12-02-2019	Returns from sales on 05-02-2019	40		
17-02-2019	Purchases	800	40	

- Q.3 (A) From the following particulars, calculate the earnings of Worker A and Worker B for one day under:
 - (a) Straight piece rate system
 - (b) Taylor's differential piece rate system

Particulars	
Standard production	100 units per hour
Normal time rate	₹50 per hour
Standard hours per day	8 hours
Output of Worker A	750 units
Output of Worker B	1000 units

Differentials to be applied are:-

- i. 80% of piece rate below standard
- ii. 120% of piece rate above standard
- Q.3 (B) Compute the earnings of the following workers under Gantt's Task Bonus Plan with the (07) help of following information:
 - · Standard output Per week 80 units
 - Time rate- ₹2 per hour
 - . Piece rate-₹ 2.50 per unit
 - . High piece rate- ₹3 per unit
 - · Standard hours in a week- 50 hours

Number of units produced by workers are:

- Aman-64 units
- Beena-76 units
- Chitra- 80 units
- David-86 units
- Elvis-90 units

OR

- Q.3 (P) From the following information, calculate the earnings of a worker under Halsey plan (50% of time saved) and Rowan plan separately:
 - Time taken to complete job- 72 hours
 - Time allowed to complete the job- 90 hours
 - Wage rate per hour- ₹25
 - Dearness allowance- ₹ 10 per day
 - Number of hours in a day- 8 hours



3

(07)

(08)

- Q.3 (Q) Calculate the total remuneration of three workers A,B and C from the following information:
 - i. Standard production per month per worker -500 units
 - ii. Actual production during the month:
 - a. A- 425 units
 - b. B- 375 units
 - c. C- 475 units
 - iii. Piece work rate is 10 paise per unit.
 - iv. Additional production bonus is ₹10 for each percentage of actual production exceeding 80% of standard production.
 - v. Dearness allowance is ₹50 per month (fixed)
- Q.4 (A) A factory has two service departments S1 and S2 and three production departments P1, P2 and P3. You are required to show the apportionment of overheads by using:
 - 1. Repeated distribution method
 - 2. Simultaneous equation method

The following are the overheads allocated for the month of April, 2019:

Particulars	₹
Product Department: P1	63000
P2	74000
P3	28000
Service Department: S1	45000
S2	20000

The service department costs are shared as follows:

Particulars	P1	P2	P3	S1	S2
S1	40%	30%	20%		10%
S2	30%	30%	20%	20%	

Q.4 (B) M/s Nivedita Enterprises has five departments A,B,C,D and E. The following are the expenses incurred during the month of March, 2019:

Particulars	. ₹
Rent	2,50,000
Repairs to plant	1,75,000
Depreciation on plant	1,19,700
Supervision	3,99,980
Insurance of stock	1,60,000
Refreshments	59,920
Lighting	1,80,000

The following data are also available in respect of five departments:

Particulars	A	В	С	D	E
Area in sq.feet	1400	1200	1100	900	400
Number of workers	25	20	10	10	5
Direct wages	10000	8000	5000	5000	2000
Value of plant	20000	18000	16000	10000	6000
Value of stock	15000	10000	5000	2000	
Number of light points	14 · ·	12.	11	9	4

Prepare a statement showing primary distribution of overheads.

OF

Q.4 (P) Jyoti Ltd. accepts various jobs which require both manual and machine operations.

The following is the budgeted cost sheet for the period 2015-16:



Particulars	₹
Direct material	3,00,000
Direct labour	2,00,000
Prime cost	5,00,000
Production overheads	6,00,000
Cost of production	11,00,000
Administrative overheads	4,00,000
Cost of sales	15,00,000
Profit	3,00,000
Sales	18,00,000

6

Additional information:

- · Labour hours for the period: 5000 hours
- · Machine hours of the period: 3000 hours
- Number of jobs for the period: 600 jobs

Calculate overhead absorption rates by following methods:

- i. Direct labour cost method
- ii. Direct labour hours method
- iii. Machine hours method
- iv. Direct material cost method
- v. Prime cost method

Q.4 (Q) From the following information, compute machine hour rate:

Particulars Cost of machine ₹44000 Scrap value ₹4000 ₹25000 p.a. Rent of the workshop General lighting ₹ 160 per month Power consumption 20 units per ₹20 per 100 units hour Administrative overheads ₹4000 p.a. 75% of depreciation Repairs Workshop's supervisor's salary ₹3000 per month Estimated working time per year 50 weeks of 40 hours each Setting up time (productive) 200 hours per year Effective life of the machine 10 years

The machine occupies ¼ th area of the workshop. The supervisor is expected to devote 1/3 rd of his time in supervising the machine.

- 0.5 (A) Explain the concepts of allocation, absorption and apportionment of overheads.
 - (B) Distinguish between Halsey's plan and Rowan's plan.

OR

- Q.5 (P) Write short notes: (any three)
 - 1 Objectives of cost accounting
 - 2 Under absorption and over absorption
 - 3 Taylor's differential piece rate system
 - 4 Trial and error method
 - 5 Bin card and stores ledger



(07)

(08)

(07)

(15)