# B.B.A DEGREE EXAMINATION APRIL 2022 <br> BUSINESS ADMINISTRATION <br> SECOND SEMESTER 

## COURSE : MAJOR CORE <br> COURSE TITLE : COST ACCOUNTING <br> TIME : 3 HOURS

MAX. MARKS: 100

## Section - A

## Answer ALL the Questions:

(10x2=20)

1. Define costing.
2. What is cost unit?
3. List any four objectives of material cost.
4. What is normal idle time?
5. Write a note on under absorption of overheads.
6. A manufacturer buys certain equipment from outside suppliers at Rs. 30 per unit. Total annual needs are 80,000 units. The following further data are available.

Annual return on investment - 10\%
Rent, insurance, taxes per unit per year Re. 13
Cost of placing an order Rs. 100
Determine the Economic Order Quantity.
7. From the following information calculate Labour turnover by applying replacement method.

Number of workers at the beginning of the period - 3,800
Number of workers at the end of the period $-4,200$
During the year, 40 workers left while 160 workers are discharged. 600 workers are recruited during the year: of these 150 workers are recruited to fill up vacancies and the rest are engaged on account of an expansion scheme.
8. Indicate the basis you would adopt for apportionment of the following items of overhead expenses to different departments.
a) Factory Rent
b) Insurance of Plant and Machinery
c) Indirect Material
d) Creche expenses.
9. During February 2020, works overhead incurred in a factory was Rs. 40,000. The machine hours worked during the month were 8,000 hours. Determine the machine hour rate to be charged to the output to recover the works overhead.
10. Calculate the Raw Materials Consumed from the following details;

Raw materials purchased - Rs.80,000
Sale of material scrap - Rs. 1,000
Opening stock of raw materials - Rs. 12,000
Closing stock of raw materials - Rs. 21,000

## Section - B

## Answer Any FIVE Questions

(5x8=40)
11. Distinguish between Management accounting and Cost accounting.
12. Explain the methods of pricing material issues.
13. Two components X and Y are used as follows:

Normal usage - 300 units per week each
Maximum usage - 450 units per week each
Minimum usage - 150 units per week each
Reorder quantity: - X 1,200 units, Y 1,000 units
Reorder period: - X 2 to 4 weeks, Y 3 to 6 weeks
Calculate for each component:
Reorder level, Minimum level, Maximum level, Average stock level.
14. a) Find out the wage per hour from the following information

Name of the worker :Mr. Vicky
Wage per year: Rs.2,400
Annual bonus : $25 \%$ of wages
Employers' contribution to P.F - 10\% of wages
Employee's contribution to P.F - 8\% of wages
Employers' contribution to E.S.I - 3\% of wages
Total leave with pay permitted during the year -60 days
Cost of labour welfare amenities - Rs.8,000
No. of workers - 200
Normal idle Time : 80 hours
Working days per annum - 320 days of 8 hours.
b) Calculate the earnings of workers A and B under straight piece rate system and

Taylor's differential piece rate system from the following particulars:
Normal rate per hour - Rs 1.80
Standard time per unit - 20 seconds
Differentials to be applied
$80 \%$ of piece rate below standard
$120 \%$ of piece rate at or above standard.
Worker A produces 1,300 units per day and worker B produces 1500 units per day.
15. In a factory, A and B are two production departments and $X$ And $Y$ are the two service departments. The overheads of the service departments are as follows:

X - Rs. 10,000 Y - Rs.4,000
The overheads of service departments are apportioned as under:

|  | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{X}$ | $\mathbf{Y}$ |
| :--- | ---: | :--- | :--- | :--- |
| $\mathbf{X}$ | $50 \%$ | $40 \%$ | - | $10 \%$ |
| $\mathbf{Y}$ | $40 \%$ | $10 \%$ | $50 \%$ | - |

Show the apportionment of the overhead of service departments under simultaneous equation method.
16. You are required to compile a statement showing cost and profit from the following information, showing clearly a) Material Consumed b) Prime Cost c) Works Cost d) Cost of Production e) Cost of sales f) Profit g) Sales

| Particulars | Rs. |
| :--- | ---: |
| Material purchased | $2,00,000$ |
| Wages | $1,00,000$ |
| Direct Expenses | 20,000 |
| Opening stock of materials | 40,000 |
| Closing stock of materials | 60,000 |

Factory overhead is absorbed at $20 \%$ on wages. Administration overhead is $25 \%$ on the works cost. Selling and distribution overheads are $20 \%$ on the cost of production. Profit is $20 \%$ on sales.
17. Product V requires three distinct processes and after the third process the product is transferred to the finished stock. you are required to prepare process accounts from the following information.

| Particulars | Process I Rs. | Process II Rs. | Process III Rs. |
| :--- | :---: | :---: | :---: |
| Direct material | 8,000 | 1,200 | 800 |
| Direct labour | 3,000 | 3,200 | 1,800 |
| Direct expenses | 1,000 | 600 | - |

The total production overheads were Rs. 12,000 and it must be allocated to different processes on the basis of $150 \%$ of direct wages. Production during the period was 400 units but there is no opening and closing stock.
Section - C

## Answer Any TWO Questions

18. From the following transactions, prepare separately the stores ledger account, using the FIFO methods for pricing issues

| Date | Particulars |  |
| ---: | :--- | :--- |
| 2017, July 1 | Opening balance | 2000 units @ Rs.10each |
| 5 | Received | 1000 units @ Rs.11each |
| 6 | Issued | 500 units |
| 10 | Received | 5000 units @ Rs.12 each |
| 12 | Received back from work, order <br> Issued on 6 |  |
| 14 | 50 units |  |
| 18 | Rssued <br> Returned to supplier out of goods <br> received on 5 | 600 units |
| 19 | Received back from work, order <br> Issued on 14 |  |
| 20 | Issued | 100 units |
| 25 | Received | 150 units |
| 28 | Issued | 500 units at Rs.14 each |
|  | 300 units |  |

Stock verification report revealed that there was a shortage of 10 units on $18^{\text {th }}$ July and another shortage of 15 units on $26^{\text {th }}$ July.
19. A manufacturer of bikes finds that in 2021 it cost him Rs. $7,20,060$ to manufacture 175 bikes, which he sold for Rs.5,400 each. The cost is made up of :

Materials - Rs. 2,82,000
Direct wages - Rs. 3,24,000
Factory overhead - Rs. 48,600
Office overhead - Rs.65,460

For the next year he estimates that:
(a) Each bike will require materials of Rs.1,600 and labour Rs.1,800
(b) The factory overhead will bear the same relation to wages as in the previous year.
(c) The office overhead percentage on factory cost will be the same as in the past.
Prepare a statement showing the profit he would make per unit, if it reduces the price of the bike by Rs.200.
20. a) From the following data, prepare a statement showing the cost per day of 8 hours of engaging a particular type of labour.
i) Monthly salary (Basic plus Dearness allowance) Rs. 400
ii) Leave salary payable to workman $15 \%$ of the basic plus dearness allowance
iii) Employee's contributions to Provident fund $8 \%$ of salary (items a and b)
iv) Employer's contributions to E.S.I 5\% of salary (items a and b)
v) Pro rata expenditure on amenities to labour Rs. 25 per head per month
vi) No. of working hours in the month 200
b) Calculate the earnings of a worker from the following as per Halsey plan:
i) Standard time -12 hours; Actual time ' $A$ ' 10 hours ' $B$ ' 8 hours ' $C$ ' 6 hours. Hourly rate Rs. 8
ii) Hourly rate of wages Rs. 10

Standard time for production of a dozen units of a product is 2 hours
Actual time taken by the workers to produce 25 dozens 40 hours
iii) Articles manufactured by Mr.'S' a worker in a factory 300

Standard time allowed 10 minutes per unit
Actual time 44 hours
Standard rate Rs. 5 per hour.
21. Universal limited has three production departments, AIpha, Beta, Gamma and two service departments, Delta and Theta. The company supplied the following information for the year ending $31^{\text {st }}$ December 2016.

Rent Rs.5, $000 \quad$ Electricity Rs. 2,000
Depreciation Rs. 5,000 Power Rs. 4,000

| Particulars | Production Departments |  | Service Departments |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Alpha | Beta | Gamma | Delta | Theta |
| Direct Wages (Rs) | 4,000 | 5,000 | 3,000 | --- | --- |
| Direct Material (Rs) | 5,000 | 6,000 | 4,000 | -- | -- |
| Area (Sq. Ft.) | 1,100 | 1,300 | 1,200 | 500 | 900 |
| No. of workers | 50 | 10 | 40 | 10 | 20 |
| No. Of light points | 8 | 12 | 10 | 4 | 6 |
| H.P. of machines | 5 | 10 | 10 | 6 | 9 |
| Value of machines (Rs.) | 15,000 | 30,000 | 22,500 | --- | 7,500 |

Expenses of Service Departments Delta and Theta are apportioned as under:

|  | Alpha | Beta | Gamma | Delta | Theta |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Delta | $20 \%$ | $40 \%$ | $30 \%$ | --- | $10 \%$ |
| Theta | $30 \%$ | $20 \%$ | $30 \%$ | $20 \%$ | --- |

You are required to
(i) Prepare primary overhead distribution summary on most equitable basis and
(ii) Prepare a secondary distribution summary by Repeated Distribution method

