## B.B.A. DEGREE EXAMINATION - BUSINESS ADMINISTRATION FIFTH SEMESTER - NOVEMBER 2013

BU 5504/BU 5501 - COST ACCOUNTING

Dept. No. $\square$ Max. : 100 Marks
Time : 9:00-12:00

## PART A

Answer ALL questions
Marks:2x10=20

1. Distinguish between 'cost unit' and 'unit cost'.
2. What do you mean by equivalent production.
3. Explain $A B C$ stock control.
4. What is a 'cost driver' in activity based costing? Give an example.
5. Explain machine hour rate.
6. Estimated overheads are Rs.50,000 and estimated labor hours 10,000 . What is the amount of overheads to be charged for the job which takes 10 labor hours to complete?
7. Standard time per unit is 2 minutes. In a day of 8 hours the worker produces 260 units. The normal wage rate is Re. 1 per unit. Calculate the wages of the worker under Taylor's differential piece rate system.
8. Annual demand 10000 units. Set up cost Rs. 50 per set up. Carrying cost of inventory Re. 1 per unit per annum. Calculate economic batch quantity.
9. In process A 500 units of product $X$ and 200 units of by-product $Y$ are produced at a joint cost of Rs. 17,000 . The by-product is sold for Rs. 1,350 after incurring Rs, 350 as separate expenses. What is the profit made on product $X$, if it is sold for Rs.20,000?
10. Total amount spent on a contract during the year was Rs.3,00,000. $75 \%$ of the work was completed at the end of the year. Work certified was $60 \%$ of the contract price. Calculate the value of uncertified work.

## PART B

## Answer ANY 5 questions

## Marks:5x8=40

11. Define cost accounting. What are its objectives?
12. Distinguish between 'process costing' and 'job costing'.
13. From the following data relating to Material $X$, prepare the Stores ledger under Weighted Average method.

| Jan $1^{\text {st }}$ | Opening balance 400 units at Rs. 5 per unit |
| :---: | :--- |
| $4^{\text {th }}$ | Issued 200 units |
| $5^{\text {th }}$ | Received 200 units at Rs.5.25 per unit |
| $10^{\text {th }}$ | Issued 300 units |
| $12^{\text {th }}$ | Received 150 units at Rs.5.40 per unit |
| $15^{\text {th }}$ | Issued 200 units |
| On the $15^{\text {th }}$ the stock verifier noticed a shortage of 10 units |  |

14. During a certain week a worker produced 240 articles. Working hours during the week are 48 . The standard rate is Rs. 6 per hour and the standard time to manufacture an article is 15 minutes. Calculate his gross wages for the week, according to:
a) Piece work with a guaranteed weekly wage
b) Rowan premium bonus plan
c) Halsey premium bonus plan
15. A Ltd furnishes you the following data for the year ending $31^{\text {st }}$ March 2013

Profit as per financial records Rs.81,362
Works overheads under-recovered in cost Rs.1,560
Administration overheads over-recovered in cost Rs. 850
Depreciation charged in Financial Accounts Rs.5,600
Depreciation recovered in cost Rs.6,250
Interest on investments Rs.4,000
Income tax Rs.20,150
Opening stock in Cost Accounts Rs.24,800
Opening stock in Financial Accounts Rs.26,300
Closing stock in Costing Rs.25,000
Closing stock in Financial Accounts Rs.23,000
Interest charged in Cost Accounts RS.2,000
Prepare a Reconciliation statement and ascertain profits as per Cost Account.
16. A contractor obtained a contract for Rs. $10,00,000$ on 1st April 2012. The expenses incurred during the year ended 31st March 2013 were as under:

Rs.
Materials issued 3,44,000
Wages paid 2,00,000
Other expenses
25,000
Plant issued on $1^{\text {st }}$ October 2012
1,00,000
Material costing Rs.10,000 and plant costing Rs.20,000 were transferred to another contract on 31/ 12/ 2013.
Material at site on 31/ 3/ 2013 was Rs.24,000
Plant is to be depreciated at $20 \%$ p.a.
Cash received from contractee was Rs.6,00,000, being 75\% of works certified. The work uncertified was Rs.14,000
Prepare the contract account for the year ending 31st March 2013.
17. X owns a truck, which cost Rs. $1,00,000$. The life of the truck is $50,000 \mathrm{kms}$. The truck runs 3000 kms per month, of which $20 \%$ is run empty. From the following data, calculate the cost per km and the freight per km to earn a profit of $20 \%$ on cost.

| Manager's salary | - | $R s .3000 \mathrm{p} . \mathrm{m}$. |
| :--- | :--- | :--- |
| Driver's salary | - | $R s .2500 \mathrm{p} \mathrm{m}$ |
| Cleaner's salary | - | $R s .1500 \mathrm{p} \mathrm{m}$ |
| Garage rent | - | $R s .1000 \mathrm{p} \mathrm{m}$ |
| Insurance | - | $4 \% \mathrm{p} \mathrm{a} \mathrm{on} \mathrm{the} \mathrm{cost} \mathrm{of} \mathrm{the} \mathrm{vehicle}$ |
| Road tax | - | $R s .1200 \mathrm{p} \mathrm{m}$ |
| Repairs |  | $-\quad 50 \%$ of depreciation |

The truck uses 1 litre of diesel for every 10 kms . Cost of diesel is Rs. 50 per litre.
18. In Process 12500 units were introduced. At the end of the week 2000 units were completed and transferred to Process 2.500 units 50\% complete remained as closing work in progress. The process costs during the week were as follows:
Material - Rs.22,500
Labor - Rs.6,750
Overheads - Rs.2,250
Calculate equivalent production, cost per equivalent unit and prepare Process 1 account.

## PART C

## Answer ANY 2 questions

Marks:2x20=40
19. A product is obtained after passing through 3 processes, $A, B$ and $C$. 5,000 units are introduced in Process $A$ at a cost of Re. 1 per unit. Other information relating to the Processes are:

|  | A | B | C |
| :--- | :--- | :--- | :--- |
| Material (Rs) | 3700 | 3000 | 7000 |
| Labour (Rs) | 4000 | 4000 | 6500 |
| Direct expenses (Rs) | 2025 | 1645 | 5032 |
| Output in units | 4750 | 4520 | 4100 |
| Process loss (\% on input) | $2 \%$ | $4 \%$ | $10 \%$ |
| Sale value of scrap per unit | $25 p$ | $50 p$ | Re.1 |

20. R Ltd gives you the following information for the year 2012, during which 10,000 units were produced and sold.
Material Rs.90,000
Power Rs.12,000
Cost of rectifying defective work Rs.3,000
Direct wages Rs.60,000
Factory indirect wages Rs.20,500
Clerical salaries Rs.39,000
Selling expenses Rs.19,500
Plant repairs Rs.11,500
Sale proceeds of factory scrap Rs.2,000
The net selling price was Rs. 30 per unit
Prepare a cost sheet and ascertain profit made in 2012.

In 2013 it is estimated that 15,000 units will be produced and sold. The rates for material and direct labour is expected to increase by $10 \%$ and $20 \%$ resp. Assuming factory overheads are recovered as a percentage of direct wages, and office and selling expenses as a percentage of works cost.
Prepare a cost sheet for the year 2013 and calculate the selling price to be charged per unit, if the company wants to earn a profit of $20 \%$ on cost..
21. In a manufacturing concern there are 2 Production departments, $A$ and $B$ and 2 Service Depts. $C$ and $D$. C renders service worth Rs. 12000 to $D$ and the balance to $A$ and $B$ in the ratio of $3: 2$. D renders service to $A$ and $B$ equally.
The overhead expenses incurred for the year are as follows:
Depreciation - Rs. 95000
Rent - Rs. 18000
Power - Rs. 10000
Canteen expenses - Rs. 5400
Sundry expenses - Rs. 4500
The following further information are given regarding the departments:

|  | $\underline{\mathrm{A}}$ | $\underline{\mathrm{B}}$ | $\underline{\mathrm{C}}$ | $\underline{\mathrm{D}}$ |
| :--- | :--- | :--- | :--- | :--- |
| Direct material (Rs.) | 6000 | 5000 | 3000 | 2000 |
| Direct labour (Rs.) | 20000 | 10000 | 10000 | 5000 |
| Floor space (sq mt) | 5000 | 4000 | 1000 | 2000 |
| Value of machinery (in lakhs) 10 | 5 | 3 | 1 |  |
| Horse power of machines | 1000 | 500 | 400 | 100 |
| No of workers | 100 | 50 | 50 | 25 |

Department A recovers overheads at a rate per labour hour. The labour hours in department A is 10000.

Department B recovers overheads at a rate per machine hour. Machine hours in department B are 5000.

Calculate the cost of a job which requires Rs. 2000 in material, Rs. 1500 in wages.
The labour hours for the job in Department A is 20 and the machine hours for the job in Department B is 10 .

