## B.A. DEGREE EXAMINATION - ECONOMICS

FIRST SEMESTER - APRIL 2016
CO 1102-ACCOUNTING FOR ECONOMISTS

Date: 05-05-2016
Dept. No. $\square$ Max. : 100 Marks
Time: 01:00-04:00

## Part A

Answer all the questions
(10x2=20 marks)

1. What is Key Factor?
2. Mention any two sources from which overhead expenses may be collected.
3. What is Ordering cost?
4. Identify the basis of apportionment for the following items
a. Canteen
b. Indirect wages
c. Depreciation of Machinery d. Insurance of stock
5. Mention types of idle time with suitable example
6. First in first out method of valuing material issues is suitable in times of $\qquad$ and Last in first out method is suitable in times of $\qquad$ .
7. Find out the labour turnover rate under Separation method, Average number of workers during the month is 550,5 workers left, 75 workers were recruited and 20 persons were discharged during the month.
8. Selling price₹. 200 p.u, Variable cost ₹. 100 p.u and Fixed cost ₹. 96,000 . Calculate the Break Even point(units)
9. The book value of fixed assets sold was ₹. 4,000. Total profit on sale of fixed assets was ₹. 2,000 and their original cost was ₹. 5,000. Calculate the capital profit.
10. From the following data calculate tax paid during the year

Provision for taxation as on 31-3-2015 ₹. 200,000
Provision for taxation as on 31-3-2014 ₹. 1,50,000
Tax provided during the year ₹. 70,000

## Part B

Answer any four questions
( $4 \times 10=40$ marks $)$
11. What are the essential features of good wage system?
12. Explain the advantages of Cash Flow statement?
13. State and explain the rules regarding transfer of profits to reserves.
14. (i) The firm employs five workers at an hourly rate of ₹. 2.00. during the week they worked for four days for a total period of 40 hours each and completed a job for which the standard time was 48 hours for each worker. Calculate the labour cost under the Halsey method and Rowan method of incentive plan payments
(ii) Calculate normal rate per hour and overtime wages of Mr. X and Mr.Y from the following particulars
Basic wages ₹. 1000 p.m
Dearness allowance ₹. 500 p.m
Normal working hours per month 200 hrs
Overtime Mr. X 10 hrs , Mr.Y 15 hrs
Overtime is paid at double the normal wages plus dearness allowance
15. Compute machine hour rate
(a) Cost of a machine ₹. $2,30,000$; Life 10 years
(b) 26 machines in the department
(c) Hours run on production 1,800
(d) Power cost $₹ .50$ per hour of running time
(e) Repairs $50 \%$ of Depreciation
(f) Departmental area 70,000 square metres, Machine area 2,500 square metres
(g) Departmental overheads(annual)

Rent ₹. 50,000
Heat and light ₹. 70,000
Supervision ₹. 1,30,000
16. From the following Balance Sheets as on 31-03-2015 and 31-03-2014. Prepare Cash Flow Statement:

| Liabilities | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ | Assets | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ |
| :--- | :---: | ---: | :--- | ---: | ---: |
| Share Capital | $1,50,000$ | $1,00,000$ | Fixed Assets | $1,50,000$ | $1,00,000$ |
| Profit \& Loss A/c | 80,000 | 50,000 | Goodwill | 40,000 | 50,000 |
| General Reserve | 40,000 | 30,000 | Stock | 80,000 | 30,000 |
| 6\% Debentures | 60,000 | 50,000 | Debtors | 80,000 | 50,000 |
| Creditors | 40,000 | 30,000 | Bills Receivable 20,000 | 30,000 |  |
| Outstanding Expenses | $\underline{15,000}$ | $\underline{10,000}$ | Bank | $\underline{15,000}$ | $\underline{10,000}$ |
|  | $\underline{3,85,000}$ | $\underline{\underline{2}, 70,000}$ |  | $\underline{3,85,000}$ | $\underline{2,70,000}$ |

17. a. Find out the economic ordering quantity from the following particulars::

Annual usage consumption per week (in units) ₹ $1,20,000$
Cost of placing and receiving one order ₹ 60
Annual carrying cost $10 \%$ of inventory value
b .Compute the (i) Re-order level (ii) Minimum leve (iii) Maximum level and Average stock level for component A and B based on the following data:

|  | A | B |
| :--- | :--- | :--- |
| Maximum consumption per week (in units) | 150 | 150 |
| Average consumption per week (in units) | 100 | 100 |
| Minimum consumption per week (in units) | 50 | 50 |
| Re-order period (in weeks) | $8-12$ | $4-8$ |
| Re-order quantity (in units) | 400 | 600 |

## Part C

## Answer any two questions

(2x20=40 marks)
18. (i) A company manufactures and markets three products $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$. All the three products are made from the same set of machines. Production is limited by machine capacity. From the following data given below, indicate priorities for products $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$ with a view to maximizing profits

|  | X | Y | Z |
| :--- | :---: | :---: | :---: |
| Raw material p.u (₹) | 11.25 | 16.25 | 21.25 |
| Labour cost p.u (₹) | 2.50 | 2.50 | 2.50 |
| Other variable cost p.u(₹) | 1.50 | 2.25 | 3.55 |
| Selling price p.u (₹) | 25 | 30 | 35 |
| Standard machine time required per unit in minutes | 39 | 20 | 28 |

( ii )The cost structure and selling prices remain the same in Periods I and Periods II,
find out:(a) Profit Volume Ratio
(b) Fixed cost
(c) Break Even Point for sales
(d) Profit when sales are of Rs.1,00,000 (e) Sales required to earn a profit of Rs. 20,000 (f) Margin of Safety for the period I (g) Margin of Safety at a profit of Rs. 15,000
(h) Variable cost in Period II

| Period | Sales $(₹)$ | $\operatorname{Profit}(₹)$ |
| :--- | :---: | :---: |
| I | $1,20,000$ | 9,000 |
| II | $1,40,000$ | 13,000 |

19. The following is an extract of the record of receipts and issues of sugarcane in a Sugar factory during October 2015

Date
October
1
3
4
8
13
14
16
20
22

Particulars
Opening balance
Issues
Issues
Issues
Received from supplier
Received from department Issues
Received from supplier
Shortage

Quantity
(tonnes)
500
70
100
80
200
15
180
180

Rate per tonne
(₹)
200
-
-
-
190
-
190

Draw up Stores ledger Card showing the above transactions under (i) First in First out method (ii) Last in
First Out method
20. A company has three production departments P1, P2 and P3 and two service departments S1 and S2. The following data are extracted from the records of the company for a particular given period:
Rent and rate ₹25,000; General lighting ₹ 3,000 ; Indirect wages ₹7,500;
Power ₹7,500; Depreciation in Machinery ₹50,000;
Sundries ₹ 50,000
Additional data:

|  | Total | Departments |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | P1 | P2 | P3 | S1 | S2 |
| Direct wages(₹) | 50,000 | 15,000 | 10,000 | 15,000 | 7,5000 | 2,500 |
| H.P of machine | 150 | 60 | 30 | 50 | 10 | -- |
| Cost of machine( ${ }^{\text {\% }}$ ) | 12,50,000 | 3,00,000 | 4,00,000 | 5,00,000 | 25,000 | 25,000 |
| Production hours | -- | 6226 | 4,028 | 4,066 | -- | -- |
| Floor space | 10,000 | 2,000 | 2,500 | 3,000 | 2,000 | 500 |
| Lighting points | 60 | 10 | 15 | 20 | 10 | 5 |

Service Department's expenses allocation:

|  | P1 | P2 | P3 | S1 | S2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| S1 | $20 \%$ | $30 \%$ | $40 \%$ | -- | $10 \%$ |
| S2 | $40 \%$ | $20 \%$ | $30 \%$ | $10 \%$ | -- |

Compute the overhead rate of production departments using Repeated distribution method.
21. M Ltd has an authorized capital of ₹5,00,000 in equity shares of ₹ 100 each. On 31/03/2015, 2,500 shares were fully called up. From the following ledger balances prepare final accounts of the company for the year ended $31^{\text {st }}$ March 2015

| Particulars | $₹$ | Particulars | $₹$ |
| :--- | ---: | :--- | ---: |
| Opening stock | 50,000 | Sales | $4,25,000$ |
| Purchases | $3,00,000$ | Advertisement | 3,800 |
| Wages | 70,000 | Bonus | 10,500 |
| Discount allowed | 4,200 | Debtors | 38,700 |
| Discount received | 3,150 | Creditors | 35,200 |
| Insurance upto 30/06/15 | 6,720 | Plant and Machinery | 80,500 |
| Salaries | 18,500 | Furniture | 17,100 |
| Rent | 6,000 | Cash in Hand | $1,34,700$ |
| General expenses | 8,950 | Reserve | 25,000 |
| Profit \& Loss Account $(\mathrm{Cr})$ | 6,220 | Loan from Manager | 15,700 |

## Additional information:

a. Closing stock ₹ 91,500
b. Provide depreciation @ $15 \%$ on Plant and Machinery and $10 \%$ furniture
c. Outstanding liabilities: Wages ₹ 5,200 , Salary ₹ 1,200 , rent ₹ 600
d. Provide $5 \%$ dividend on paid up share capital
e. Provide for Corporate dividend tax $17 \%$

