LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600034

## B.A.DEGREE EXAMINATION - ECONOMICS

THIRDSEMESTER - APRIL 2018
16UCO3AL02- ACCOUNTING FOR ECONOMISTS

Date: 03-05-2018
Time: 01:00-04:00
Dept. No. $\square$ Max. : 100 Marks

## SECTION - A

Answer ALL the Questions

## (10 X 2=20)

State any four objectives of Material Control.
How do you calculate "Cost of material consumed' '?
Write a short note on Funds from operation.
State any two differences between cash flow statement and fund flow statement.
Find out Economic Order Quantity from the following particulars:
Annual usage
: 1600 units
Cost of material per unit : Rs 40 per unit

Cost of placing and receiving one order is Rs 50 and annual carrying cost of inventory is $10 \%$ of inventory value.
List out any five methods of pricing material issues.
What is meant by labour cost?
Ascertain bonus under Halsey Plan:

| Standard Time | $: 15$ Hours |
| :--- | :--- |
| Actual Time | $: 10$ Hours |
| Time rate | $:$ Rs 2 per Unit. |

Sales
Rs 20,000
Fixed cost
Rs 4,000
Break even Point Rs 10,000
Calculate (a)P/V Ratio (b) Profit
Calculate BEP in units and value for the following:
Total Cost
Rs 50,000
Total variable Cost Rs 30,000
Sales(5000 units) Rs 50,000

Answer any FOUR questions
SECTION - B
$(4 \times 10=40)$
From the following balance sheets you are required to prepare a Cash flow statement:

| Liabilities | 2015 <br> Rs | 2016 <br> Rs | Assets | 2015 <br> Rs | 2016 <br> Rs |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Share capital | $3,00,000$ | $3,50,000$ | Land | 70,000 | 86,000 |
| Profit and loss A/c | 20,000 | 33,000 | Stock | 90,000 | $1,00,000$ |
| Current liabilities | 90,000 | 65,000 | Debtors <br>  |  | $1,20,000$ |
| Cash | $1,15,000$ |  |  |  |  |
|  | $4,10,000$ | $4,48,000$ |  | $4,10,000$ | $1,47,000$ |

2. a)Find out EOQ from the following Particulars:

Annual usage : 6000 units
Cost of material per unit : Rs 20
Cost of placing and receiving one order : Rs 60 . Annual carrying cost of one unit : $10 \%$ of inventory value.
b) From the following information, calculate:
a) Maximum stock level
b) Minimum stock level
c) Re-order level
d)Average stock level

Minimum consumption - 240 units per day
Maximum consumption -420 units per day
Normal consumption - 300 units per day
Re order quantity - 3600 units
Re order period 10-15 days
Normal re-order period- 12 days.
13 From the particulars given below write-up the stores ledger card:
2015
January 1 opening stock 1000 units at Rs 26 each
5 purchased 500 units at Rs 24.50 each
7 issued 750 units
10 purchased 1500 units at Rs 24 each
12 issued 1100 units
15 purchased 1000 units at Rs 25 each
17 issued 500 units
18 issued 300 units
25 purchased 1500 units at Rs 26 each
29 issued 1500 units
Adopt FIFO method of issue and ascertain the value of closing stock.
14. XYZ corporation Ltd.,has prepared the following budget estimates for the year 2015-2016:

$$
\begin{array}{lc}
\text { Sales units } & - \text { Rs } 15000 \\
\text { Fixed expenses } & - \text { Rs } 34000 \\
\text { Sales value } & - \text { Rs Rs } 1,50,000 \\
\text { Variable cost } & - \text { Rs } 6 \text { per unit }
\end{array}
$$

You are required to:
i) Find $\mathrm{P} / \mathrm{V}$ ratio,BEP and margin of safety.
ii) Calculate the revised P/V ratio,BEP and margin of safety in each of the following cases.
a) Decrease of $10 \%$ in selling price.
b) Increase of $10 \%$ in variable costs.

A Factory has three service departments $L, M$ and $N$ and two production departments X and Y .The following are the expenses allocated and apportioned to the departments as per primary distribution summary.

| L <br> $(\mathrm{Rs})$ | M <br> $(\mathrm{Rs})$ | N <br> $(\mathrm{Rs})$ | X <br> $(\mathrm{Rs})$ | Y <br> $(\mathrm{Rs})$ |
| :---: | :---: | :---: | :---: | :---: |
| 10000 | 8000 | 12000 | 30000 | 40000 |

The following additional information is also available on the basis of a detailed analysis made.

|  | Service departments |  |  | Production departments |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | L | M | N | X | Y |
| L's service used | - | $20 \%$ | $30 \%$ | $30 \%$ | $20 \%$ |
| M's service used | - | - | $40 \%$ | $30 \%$ | $30 \%$ |
| N's service used | - | - | - | $60 \%$ | $40 \%$ |

Prepare a statement showing apportionment of service department overheads under the step method.
a) Calculate the normal and overtime wages payable to a workman from the following data:

| Days | Hours worked |
| :---: | :---: |
| Monday | 8 |
| Tuesday | 12 |
| Wednesday | 10 |
| Thursday | 10 |
| Friday | 9 |
| Saturday | 4 |
|  | 53 |

Normal working hours - 8 Hrs per day: on Saturday - 4 Hrs

Normal rate Rs 2 per hour.
Over time rate - upto 9 Hrs in a day at single rate and over 9 hrs in a day at double rate. Or upto 48 hours in a week at single rate and over 48 hrs at double rate, whichever is more beneficial to the worker b)Calculate the earnings of the workers X and Y under Taylor's differential piece rate system from the following details:

Standard time per unit $=12$ minutes
Standard rate per hour $=$ Rs 60
Differentials to be used $80 \%$ and $120 \%$
In a particular day of 8 hours, worker X produced 30 units and worker Y produced 50 units.
17. a) A manufacturing company finds that while cost of making a component part is Rs 10 , the same is available in the market at Rs 9 with an assurance of continuous supply. Give your suggestion whether to make or buy this part. Give also your views incase the supplier reduces the price from Rs 9 to Rs 8.The cost information is as follows:

| Material | Rs 3.50 |
| :--- | :---: |
| Direct labour | Rs 4.00 |
| Other variable expenses | Rs 1.00 |
| Fixed expenses | Rs 1.50 |
|  | Rs 10.00 |

b) From the following particulars, prepare stores ledger by adopting weighted average method of pricing of material issues.

| Date | Receipts | Issues |
| ---: | :---: | :--- |
| 2010 Jan 1 | 300 units at Rs 10 per unit |  |
| 10 | 200 units at Rs 12 per unit |  |
| 12 | 400 units at Rs 11 per unit |  |
| 15 |  | 250 units |
| 16 |  | 150 units |
| 18 | 200 units at Rs 14 per unit | 300 units |
| 20 |  |  |
| 22 | 300 units at Rs 15 per unit |  |
| 25 | 100 units at Rs 16 per unit |  |
| 27 |  | 200 units |
| 31 |  | 100 units |

## SECTION C

Answer any TWO questions
( $\mathbf{2} \times 20=40$ )
XYZ Co.Ltd is a company with an authorized capital of Rs $5,00,000$ divided into 5,000 equity shares of Rs 100 each on 31-12-1985 of which 2,500 shares were fully called up. The following are the balances extracted from the ledger as on 31-12-1985

Trial balance of XYZ Co Ltd

| Debit | Rs | Credit | Rs |
| :--- | ---: | :--- | ---: |
| Opening stock | 50,000 | Sales | $3,25,000$ |
| Purchases | $2,00,000$ | Discount received | 3,150 |
| Wages | 70,000 | Profit and loss a/c | 6,220 |
| Discount allowed | 4,200 | Creditors | 35,200 |
| Insurance (upto 31.3.86) | 6,720 | Reserves | 25,000 |
| Salaries | 18,500 | Loan from managing director |  |
| Rent | 6,000 | Share capital | 15,700 |
| General expenses | 8,950 |  | $2,50,000$ |
| Printing | 2,400 |  |  |
| Advertisements | 3,800 |  |  |
| Bonus | 10,500 |  |  |
| Debtors | 38,700 |  |  |
| Plant | $1,80,500$ |  |  |
| Furniture | 17,100 |  | $\mathbf{6 , 6 0 , 2 7 0}$ |
| Bank | 34,700 |  |  |
| Bad debts | 3,200 |  |  |
| Calls-in -arrears | 5,000 |  |  |
|  | $\mathbf{6 , 6 0 , 2 7 0}$ |  |  |

You are required to prepare statement of profit and loss for the year ended 31-12-1985 and a balance
sheet as on that date. The following further information is given.
a) Closing stock was valued at Rs $1,91,500$
b) Depreciation on plant at Rs $15 \%$ and on furniture at $10 \%$ should be provided.
c) A tax provision of Rs 8000 is considered necessary.
d) The directors declared an interim dividend on 15.8 .85 for 6 months ending June 30,1985@ 6\%.
e) Provide for corporate dividend tax @ $17 \%$.

Kamesh Ltd.,has three production departments A,B and C and two service departments D and E.The following figures are extracted from the records of the company

Rent and rates Rs 5000
Indirect Wages Rs 1500
Depreciation of Machinery Rs 10000
General Lighting Rs 600
Power Rs 1500
Sundries Rs 10000
Following further details are available:

|  | Total | A | B | C | D | E |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Floor space in square feet | 10000 | 2000 | 2500 | 3000 | 2000 | 500 |
| Light points | 60 | 10 | 15 | 20 | 10 | 5 |
| Direct wages(Rs) | 10000 | 3000 | 2000 | 3000 | 1500 | 500 |
| H.P of machines | 150 | 60 | 30 | 50 | 10 | - |
| Value of machinery(Rs) | 250000 | 60000 | 80000 | 100000 | 5000 | 5000 |

Apportion the cost to various departments on the most equitable basis by preparing a primary departmental distribution summary.
a) From the following particulars, calculate earnings of a worker under:
i) Time rate system
ii) Piece wage rate
iii) Halsey plan
iv) Rowan plan

Wage rate Rs 2 per hour
Production per hour- 4 units
Dearness allowance- Re 1 per hour
Standard time fixed- 80 hours
Actual time taken-50 hours
Production 250 units
b)The sales turnover and profit during two years are as follows:

| Year | Sales (Rs.) | Profit (Rs.) |
| :---: | :---: | :---: |
| 2006 | 140,000 | 15000 |
| 2007 | 160,000 | 20000 |

Calculate:
(a) P/V ratio.
(b) Breakeven point.
(c) Sales required to earn a profit of Rs. $40,000$.
(d) Fixed expenses and
(e) Profit when sales are Rs.1, 20,000.

Draw a stores ledger card recording the following transactions under a) FIFO and b)LIFO
Method
2010
July 1 opening stock 2000 units at Rs 10 each.
5 Received 1000 units at Rs 11 each.
6 issued 500 units.
10 Received 5000 units at Rs 12 each.
12 Received back 50 units out of the issue made on $6^{\text {th }}$ July.
14 Issued 600 units.
18 Returned to supplier 100 units out of the issue made on $5^{\text {th }}$ July.
19 Received back 100 units out of the issue made on $14^{\text {th }}$ July.
20 Issued 150 units.
25 Received 500 units at Rs 14 each.
28 Issued 300 units.
The stock verification report reveals that there was a shortage of 10 units on $18^{\text {th }}$
July and another shortage of 15 units on $26^{\text {th }}$ July.

