STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 600086. (For candidates admitted during the academic year 2019-2020 and thereafter)

## B.COM (A\&F). DEGREE EXAMINATION NOVEMBER 2023

ACCOUNTING AND FINANCE
THIRD SEMESTER
COURSE : MAJOR - CORE

PAPER : TOOLS FOR MANAGERIAL DECISION MAKING
SUBJECT CODE
: 19AF/MC/TD34
TIME
: 3 HOURS
MAX. MARKS: 100
SECTION - A
ANSWER ALL QUESTIONS:
(10 x $2=20$ )

1. What is Management Accounting?
2. How does budgetary control assist in financial planning?
3. Write a note on Break-even point.
4. Differentiate between PERT and CPM.
5. What is a responsibility centre?
6. From the following data calculate $\mathrm{P} / \mathrm{V}$ Ratio
Rs.

Sales 80,000
Fixed expenses 15,000
Break even point 50,000
7. Rebecca presents the following results for one year. Calculate $\mathrm{P} / \mathrm{V}$ ratio.

|  | Rs |
| :--- | ---: |
| Sales | $2,00,000$ |
| Variable costs | $1,20,000$ |
| Fixed cost | 50,000 |
| Net profit | 30,000 |

8. From the following, calculate material price variance for material consumed, assuming standard price per kg of Rs. 8
Opening stock of material: 50 g at Rs. 10 per kg
Purchases $\quad 850 \mathrm{~kg}$ at Rs. 10 per kg
Closing stock of material 100 kg .
9. From the following information, calculate Break even point.
Sales price

- Rs. 20 per unit
Variable cost - Rs. 14 per unit
Fixed cost
- Rs. 79,200

10. From the following ,calculate sales value variance

| Product | Quantity Units | Price <br> Rs. | Quantity Units | Price <br> Rs. |
| :---: | :---: | :---: | :---: | :---: |
| A | 1,000 | 20 | 1,300 | 21 |
| B | 2,000 | 15 | 2,300 | 14 |
| Total | 3,000 |  | 3,600 |  |

## SECTION - B

## ANSWER ANY FIVE QUESTIONS:

11. The activities of a project have the following PERT time estimates:

| Job | Optimistic time | Most likely time | Pessimistic time |
| :--- | :--- | :--- | :--- |
| $1-2$ | 3 | 6 | 15 |
| $7-8$ | 4 | 19 | 28 |
| $2-3$ | 6 | 12 | 30 |
| $3-5$ | 5 | 11 | 17 |
| $5-8$ | 1 | 4 | 7 |
| $6-7$ | 3 | 9 | 27 |
| $4-5$ | 3 | 6 | 15 |
| $2-4$ | 2 | 5 | 8 |
| $1-6$ | 2 | 5 | 14 |

I. Draw the net worth diagram and determine the critical path.
II. Find the project completion time and its variance
12. Vishal presents the following results for one year. Calculate the $\mathrm{P} / \mathrm{V}$ ratio, BEP and Margin of safety
Rs.

Sales 2,00,000
Variable cost $\quad 1,20,000$
Fixed cost 50,000
Net profit 30,000
13. A company produces two products R and S . The following are the materials consumed for the production of 100 tons of output

Product R Product S

| Material | Quantity <br> Tons | Price <br> Rs. | Quantity <br> Tons |
| :--- | :---: | :---: | :---: |
| A | 20 | 10 per ton | 40 |
| B | 30 | 5 per ton | - |
| C | 40 | 8 per ton | 20 |
| D | 20 | 20 per ton | 30 |
| E | 5 | 50 per ton | 20 |

During the quarter ended 31 st March 2019, 500 tons of R and 400 tons of $S$ were planned to be produced. Prepare material consumption budget showing total cost of material budgeted to be consumed for the quarter.
14. A manufacturing concern which has adopted standard costing furnishes the following information:

Standard materials for 70 kg of finished product: 100 kg
Price of material Re. 1 per kg
Actual output $2,10,000 \mathrm{~kg}$
Material used 2,80,000 kg
Cost of material Rs.2,52,000
Calculate Material price variance, Material usage variance, Material cost variance.
15. A Factory is currently working at $50 \%$ capacity and produces 10,000 units at a cost of Rs. 180 per unit as per details below

|  | Rs. |  |
| :--- | ---: | ---: |
| Materials | 100 |  |
| Labour | 30 |  |
| Factory overheads | 30 | (Rs. 12 fixed) |
| Administrative overhead | 20 | (Rs. 10 fixed) |
| Total | 180 |  |

The current selling price is Rs. 200 per unit. At $60 \%$ working material cost per unit increases by $2 \%$ and selling price per unit falls by $2 \%$. At $80 \%$ working, material cost per unit increases by $5 \%$ and selling price per unit falls by $5 \%$
Estimate Profits of the factory at $60 \%$ and $80 \%$ and offer your comments.
16. From the following information, calculate
a) Break even point
b) Numbers of units that must be sold to earn a profit of Rs. 60,000, per year.

Sales price - Rs. 20 per unit
Variable cost - Rs. 14 per unit
Fixed cost - Rs 79,200.
17. Calculate labor variances from the following data:

A factory worked for 6000 labor hours during a week. 200 hours were wasted due to power failure. The sundry work done by the workers was equal to 6400 standard hours. The standard rate per hour was Rs.15. The actual wage rate was Rs. 20 per hour.

## SECTION - C

ANSWER ANY TWO QUESTIONS:
18. Draw up a flexible budget for production at $75 \%$ and $100 \%$ capacity on the basis of the following data for a $50 \%$ capacity

|  | Per unit |
| :--- | :---: |
|  | Rs. |
| Materials | 100 |
| Labour | 50 |
| Variable expenses (direct ) | 10 |
| Administrative expenses (50\% fixed) | 40,000 |
| Selling and distribution expenses (60\% fixed) | 50,000 |
| Present production (50\% activity) | 1,000 units |

19. A. Present sales

Rs. $1,00,000$
Variable cost
Rs. 60,000
Fixed cost
Rs. 20,000
Calculate P/V Ratio, Break even point and Margin of Safety.
Ascertain the effect of $10 \%$ reduction of selling price on:
a) $\mathrm{P} / \mathrm{V}$ Ratio b) Break even point c) Margin of Safety

Also calculate the sales required to maintain the profit at present level
B. An automobile manufacturing company finds that the cost of making Part No. 304 in its own workshop is Rs.6. The same part is available in the market at Rs. 5.60 with an assurance of continuous supply. The cost data to make the part are:
Material
Rs. 2
Direct Labour
Rs. 2.5
Other Variable cost
Rs. 0.50
Fixed cost
Re. 1
Total Cost
Rs. 6
Should the part be made or bought?
20. From the following particulars calculate sales variances.

Budgeted sales

| Product | Quantity <br> Units | Price <br> Rs. | Quantity <br> Units | Price |
| :--- | :--- | :--- | :--- | :--- |
| A | 1,000 | 20 | 1,300 | 21 |
| B | 2,000 | 15 | 2,300 | 14 |
|  | 3,000 |  | 3,600 |  |

21.From the following data forecast the cash position at the end of April, May and June 2018

| Month <br> 1998 | Sales | Purchases | Wages | Sales <br> expense |
| :--- | :--- | :--- | :--- | :--- |
| February | $1,20,000$ | 80,000 | 10,000 | 7,000 |
| March | $1,30,000$ | 98,000 | 12,000 | 9,000 |
| April | 70,000 | $1,00,000$ | 8,000 | 5,000 |
| May | $1,16,000$ | $1,03,000$ | 10,000 | 10,000 |
| June | 85,000 | 80,000 | 8,000 | 6,000 |

Further information:
Sales at $10 \%$ realised in the month following the month of supply
Wages 20\% paid in the following month
Sundry expenses paid in the month itself
Income tax Rs. 20,000 payable in June
Income from investment Rs. 2000 received half- yearly in March and September
Cash balance on hand as on 1.4.2018 Rs. 40,000

