## Reg. No.: :-

Name : $\qquad$
I Semester B.Com. Degree (C.B.C.S.S. - O.B.E. - Regular/Supplementary/ Improvement) Examination, November 2023 (2019 Admission Onwards) General Awareness course

## 1A11COM : BUSINESS STATISTICS AND BASIC NUMERICAL SKILLS

Time : 3 Hours

## SECTION - A

Answer any six questions. Each question carries 1 mark.

1. Define Statistics.
2. What is Range ?
3. What do you mean by Index Number ?
4. What is Crammers Rules?
5. What is Set Theory ?
6. What is Null Matrix?
7. Calculate mode, if the mean and median are respectively 28 and 24.
8. Skewness is 1.59 , its mean is 148 and mode 112 , find the standard deviation.

## SECTION - B

Answer any six questions. Each question carries 3 marks.
9. What are the functions of Statistics ?
10. What are the problems in constructing Index Numbers?
11. Explain the characteristic of a good average.
12. Sharers of two companies have the following data:

## Company A Company B

## Mean

15

$$
20
$$

Standard Deviation 5 8
i) Which company's share is more stable ?
ii) Which company's share is speculative?
13. An aeroplane covers four sides of a square at speeds of $100,200,300$, and 400 km per hour respectively. What is the average speed of the Plane?
14. Find Quartile Deviation
$48,18,20,24,27,30,55$.
15. Find the value of the determinant of the Matrix

$$
A=\left|\begin{array}{ccc}
4 & 7 & 8 \\
-9 & 0 & 0 \\
2 & 3 & 4
\end{array}\right|
$$

16. Ravi obtained 70 and 75 marks in the first two-unit tests. Find the minimum marks he should get in the third test to have an average of at least 60 marks.

## SECTION - C

Answer any two questions. Each question carries 8 marks.
17. From the following data compute the arithmetic averages of wages:

| Wages | Below <br> 10 | Below <br> 20 | Below <br> 30 | Below <br> 40 | Below <br> 50 | Below <br> 60 | Below <br> 70 | Below <br> 80 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No. of workers | 4 | 16 | 40 | 76 | 96 | 112 | 120 | 125 |

18. Compute
i) Laspeyre's
ii) Paasche's and
iii) Fisher's index numbers from the following data :

| Commodity | 2012 |  | 2022 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Price | Quantity | Price | Quantity |
| A | 5 | 100 | 6 | 150 |
| B | 4 | 80 | 5 | 100 |
| C | 2.5 | 60 | 5 | 72 |
| D | 12 | 30 | 9 | 33 |

19. Solve the system of equation $2 x-3 y=1$ and $3 x-4 y=1$.
