## B. B. A. DEGREE END SEMESTER EXAMINATION - OCT 2020 : FEBRUARY 2021

SEMESTER 1 : INTEGRATED MARKETING AND NEW MEDIA (CORE COURSE) COURSE : 20U1CRBBA3 : BUSINESS STATISTICS
(For Regular - 2020 Admission)
Time : Three Hours
Max. Marks: 60

## PART A

Answer All (1 mark each)

1. What is a sample?
2. What is mid value?
3. What is bimodel series?
4. Calculate Q3 of $16,14,26,24,20,36.22 .42$
5. What is absolute measure of dispersion?
6. What is coeffecient of range?
7. What is a time series component?
8. What is positive correlation?

$$
(1 \times 8=8)
$$

PART B
Answer any 6 (2 marks each)
9. Define statistics
10. What is geographical Classification?
11. Calculate Mean and Median from the following

| Daily wages in (Rs.) | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of persons | 20 | 43 | 75 | 67 | 72 | 45 | 39 | 9 | 8 |

12. What is grouping table?
13. The weights of 5 ear-heads of sorghum are $100,102,118,124,126 \mathrm{gms}$. Find the standard deviation
14. Calculate range
$23,81,20,19,17,14,30,32,26,23,27$ and 38
15. Write note on moving average
16. What is nonlinear correlation?

## PART C

Answer any 4 (5 marks each)
17. Explain the importance of statistics in different fields
18. Compute weighted arithmetic mean

## Number of TV's per Household Number of Households

1
2378
73
$3 \quad 459$
490
19. Calculate Mean
$\begin{array}{llllllllll}\text { Marks } & 10 & 15 & 20 & 25 & 30 & 35 & 40 & 45 & 50\end{array}$
$\begin{array}{llllllllll}\text { No. of Students } & 6 & 4 & 14 & 6 & 8 & 12 & 7 & 3 & 10\end{array}$
20. $\begin{array}{llllllllll}\text { Marks } & 10 & 12 & 16 & 20 & 25 & 30 & 35 & 40\end{array}$
$\begin{array}{lllllllll}\text { No. of Students } & 12 & 5 & 3 & 7 & 8 & 6 & 4 & 5\end{array}$
Calculate quartile deviation and its coeffecient
21. What do you mean by components of time series?
22. Explain various methods for calculating correlation

PART D
Answer any 2 ( 10 marks each)
23. Define Statistics. Explain various features of statistics. What are the major limitations of Statistics?
24. Calculate Median from the following

| Marks More than | 0 | 10 | 20 | 30 | 40 | 50 | 60 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No: of Students | 60 | 52 | 42 | 30 | 14 | 6 | 4 |

25. The frequency distribution of seed yield of 50 seasamum plants are given below. Find the standard deviation.

| Seed yield in gms | $2.5-3.5$ | $3.5-4.5$ | $4.5-5.5$ | $5.5-6.5$ | $6.5-7.5$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No of plants | 4 | 6 | 15 | 15 | 10 |

26. Fit a straight line trend to the following series by the method of least squares
Years : $2010 \quad 20112012 \quad 20132014$
201520162018
$\begin{array}{llllll}\text { Production of Rice(in } 1000 \text { tons) : } & 3 & 5 & 8 & 7 & 10\end{array}$
$14 \quad 15 \quad 18$
