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# BBA DEGREE END SEMESTER EXAMINATION - MARCH 2020 

SEMESTER 2 : INTEGRATED MARKETING AND NEW MEDIA
COURSE : 16U2CRBBA5 : BUSINESS STATISTICS
(For Regular - 2019 Admission \& Improvement /Supplementary - 2018/2017/2016 Admissions)

Time : Three Hours
Max. Marks: 75

## Section A

Answer all the Following (1 mark each)

1. What is population?
2. What is cumulative frequency?
3. Calculate median of $16,14,26,24,20,36.22 .42$
4. What is absolute measure of dispersion?
5. What is cyclic variation?
6. What isnegative correlation?

## Section B

Answer any 7 (2 marks each)
7. What is multiple classification?
8. Write note on frequency distribution
9. Calculate Mean and Median from the following

Daily wages in (Rs.) $\quad 5 \quad 10 \quad 15 \quad 20 \quad 25 \quad 30$
$\begin{array}{lllllllllll}\text { No. of persons } & 20 & 43 & 75 & 67 & 72 & 45 & 39 & 9 & 8\end{array}$
10. A football team keep records of the number of goals it scores per match during a season. The list is shown below
Find the mean number of goals per match

| No : of Goals | Frequency |
| :---: | :---: |
| $\mathbf{0}$ | 8 |
| $\mathbf{1}$ | 10 |
| $\mathbf{2}$ | 12 |
| $\mathbf{3}$ | 3 |
| $\mathbf{4}$ | 5 |
| $\mathbf{5}$ | $\mathbf{2}$ |

11. What are the merits and demerits of range?
12. Write notes on quartile deviation
13. What is trend?
14. write notes on trend value
15. What are the uses of time series?
16. What is nonlineal correlation?

## Section C

## Answer any 5 (5 marks each)

17. 8823272886969493869982242455889955868236963926548710

1248272629100598384481044630294010160894649106333630 10436374040106729450602439494666107769646672678504443 2967569993488010232514950366870908346799910356844640 Prepare a frequency distribution with 10 as class intervals
18. Calculate median from the following

| Marks | $0-10$ | $10-20$ | $20-40$ | $40-70$ | $70-80$ | $80-90$ | $90-100$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No: of Students | 2 | 6 | 19 | 17 | 10 | 6 | 10 |

19. Calculate weighted arithmetic mean

| No: of offices | 10 | 15 | 20 | 25 | 30 | 35 | 40 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$\begin{array}{llllllll}\text { No: } \begin{array}{ll}\text { of computers } & 2\end{array} & 6 & 19 & 17 & 10 & 12 & 8\end{array}$ per office
20. $\begin{array}{llllllllll}\text { 20rks } & 10 & 20 & 30 & 40 & 50 & 60 & 70 & 80\end{array}$
$\begin{array}{lllllllll}\text { No. of Students } & 3 & 5 & 8 & 7 & 6 & 4 & 2 & 5\end{array}$
Calculate quartile deviation and its coeffecient
21. $\begin{array}{llllllllll} & \text { Marks } & 10 & 12 & 16 & 20 & 25 & 30 & 35 & 40\end{array}$

| No. of Students | 12 | 5 | 3 | 7 | 8 | 6 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Calculate quartile deviation and its coeffecient
22. What are the uses of time series analysis?
23. Explain the procedure in computing 3 yearly moving average
24. Explain the relevance of the method of least square in regression analysis

## Section D <br> Answer any 2 (15 marks each)

25. 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 |

26. From the data given below, calculate standard deviation and coefficient of variation

| Class | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 10 | 18 | 16 | 26 | 12 | 16 |

27. Calculate 2-yearly, 4-yearly and 6-yearly moving average trend for the time series given below. Year: $2001 \quad 2002 \quad 2003 \quad 2004 \quad 2005 \quad 2006 \quad 2007 \quad 2008 \quad 2009 \quad 2010$
20112012
$\begin{array}{llllllllllllll}\text { Quantity : } & 36 & 28 & 20 & 31 & 27 & 26 & 28 & 31 & 26 & 25 & 34\end{array}$ 32
28. Following are the mark of two students in English and Mathematics.

| Marks in <br> English | 56 | 75 | 45 | 71 | 61 | 64 | 58 | 80 | 76 | 61 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marks in <br> Mathematics | 66 | 70 | 40 | 60 | 65 | 56 | 59 | 77 | 67 | 63 |

Compute Spearman rank correlation

