Reg. No.:
Name: $\qquad$

# I Semester B.B.A./B.B.A. R.T.M./B.B.A. T.T.M. Degree (CCSS - Regular) Examination, November 2014 (2014 Admn.) COMPLEMENTARY COURSE 1 C01 BBA/BBA(RTM)/BBA(TTM) : Business Statistics 

Time: 3 Hours

## SECTION - A

Answer the 4 questions. Each question carries $\frac{1}{2}$ mark.

1. Define Statistics as a data.
2. What is classification?
3. What do you mean by class limits ?
4. Explain one dimensional diagram.
SECTION-B

Answer any four questions. Each question carries 1 mark.
5. What is Pictograph?
6. Explain cumulative frequency curve.
7. Define mode.
8. Find the value of median from the following :

$$
\begin{array}{llllllll}
\mathbf{x}: & 5 & 8 & 14 & 7 & 12 & 20 & 18
\end{array}
$$

9. Find the value of correlation from the following :

| $\mathbf{x}:$ | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $y:$ | 1 | 2 | 3 | 4 | 5 |

10. Find coefficient of mean deviation from the data given below:

Mean deviation $=15.37$; Median $=43$.

## SECTION-C

Answer any six questions. Each question carries 3 marks.
11. State the properties of Arithmetic mean.
12. Explain the merits and median.
13. What is coefficient of variation ? State its uses.
14. What is Meso Kurtic curve ?
15. Calculate quartile deviation from the following :

| Marks | $:$ | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Students : | 5 | 8 | 13 | 7 | 7 |  |

16. From the following calculate regression equation of $X$ on $Y$. Also calculate the value of $X$ if the value of ' $Y$ ' is 30 .

| $\mathrm{X}:$ | 8 | 7 | 10 | 9 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{Y}:$ | 15 | 18 | 17 | 21 | 14 |

17. Given below are the figures of sales ('000 rupees) of a certain shop.

Year: $2006 \quad 2007 \quad 2008 \quad 2009 \quad 2010 \quad 2011 \quad 2012$
Sales: $\begin{array}{llllllll}125 & 128 & 133 & 135 & 140 & 141 & 143\end{array}$
Fit a straight line trend by the method of least square, and find the trend values for each year.
18. Calculate standard deviation from the following :

| x: | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{y}:$ | 3 | 6 | 9 | 13 | 8 | 5 | 4 |

## SECTION - D

Answer any two questions. Each question carries 8 marks.
19. Define Statistics as a method. State its characteristics.
20. The mean salary paid to two employees of an establishment was found to be Rs. 541.20. Later on, it was discovered that the salary of two employees was wrongly entered as Rs. 891 and Rs. 495. Their correct salary were Rs. 591 and Rs. 555. Find the correct Arithmetic mean.
21. Calculate Karl Pearson's coefficient of skewness from the following :

| Variable | Frequency |
| :---: | :---: |
| $70-80$ | 11 |
| $60-70$ | 12 |
| $50-60$ | 30 |
| $40-50$ | 35 |
| $30-40$ | 21 |
| $20-30$ | 11 |
| $10-20$ | 6 |
| $0-10$ | 5 |

