

K15U 0556

Reg. No. :

Name :

I Semester B.B.A./B.B.A.R.T.M./B.B.A.T.T.M. Degree (CCSS – Reg./ Supple./Improv.) Examination, November 2015 Complementary Course 1C01 B.B.A./B.B.A.(R.T.M.)/B.B.A. (T.T.M.) BUSINESS STATISTICS (2014 Admn. Onwards)

Time: 3 Hours

Max. Marks: 40

SECTION - A

Answer the 4 questions. Each question carries 1/2 marks.

- 1. Define statistics as a method.
- 2. What is Tabulation ?
- 3. Explain class intervals.
- 4. What do you mean by two dimensional diagram ?

 $(4 \times \frac{1}{2} = 2)$

SECTION - B

Answer any 4 questions. Each question carries 1 mark.

- 5. What is cartograms?
- 6. Explain less than ogives.
- 7. Define a median.
- Find out Ist quartile from the following : X : 8, 10, 15, 7, 6, 14, 18
- 9. Find the value of coefficient of correlation from the following data :

| X : | 50 | 40 | 30 | 20 | 10 |
|-----|----|----|----|----|----|
| Y : | 10 | 20 | 30 | 40 | 50 |

10. Find the value of mean if Median = 8 and Mode = 10.

(4×1=4)

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SECTION-C

Answer any six questions. Each question carries 3 marks.

- 11. Explain the features of a good measure of central tendency.
- 12. State the merits of Harmonic mean.
- 13. Distinguish between Mean Deviation and Standard Deviation.
- 14. What is Lepto Kurtic Curve ?
- 15. The Arithmetic mean of 25 observation was found to be 40. Later on it was discovered that a value was taken 25 instead of 52. Find the correct mean.
- 16. From the following obtain regression equation line of Advertisement expense on sales.

| Sales (in 000) : | 91 | 53 | 45 | 76 | 89 | 95 | 80 | 65 |
|--------------------------|----|----|----|----|----|----|----|----|
| Advertisement expenses : | 15 | 8 | 7 | 12 | 17 | 25 | 20 | 13 |

Estimate the advertisement expenses for a sale of Rs. 1,20,000.

17. Find the coefficient of quartile deviation from the following data.

Marks in statistics 60 80 10 20 30 40 50 70 0 above mark : 80 70 30 14 No. of Students : 150 140 100 80 0

18. Calculate mode from the following :

| Marks : | . 0 - 10 | 10 - 20 | 20 - 25 | 25 - 30 | 30 - 40 | 40 - 50 | |
|-------------|----------|---------|---------|---------|---------|---------|--|
| Frequency : | 8 | 12 | 5 | 9 | 12 | 10 | |

(6×3=18)

SECTION - D

Answer any two questions. Each question carries 8 marks.

- 19. Define statistics as a data. Explain its features.
- 20. Find Harmonic Mean from the following :

| Class | f. |
|---------|----|
| 5-10 | 2 |
| 10-15 | 9 |
| 15-20 | 29 |
| 20-25 | 54 |
| 25-30 | 11 |
| 30 - 35 | 5 |

21. Calculate trend by four-year moving average of the data given below :

| Year | Production | | <i>.</i> | |
|------|------------|---|----------|----------|
| 2001 | 614 | | | |
| 2002 | 615 | | | |
| 2003 | 652 | | | |
| 2004 | 678 | × | | |
| 2005 | 681 | | | |
| 2006 | 655 | | | |
| 2007 | 717 | | 3 | |
| 2008 | 719 | | | |
| 2009 | 708 | | | |
| 2010 | 779 | | 2 | |
| 2011 | 757 | | | (2×8=16) |
| | | | | |