



Reg. No. : .....

Name : .....

**First Semester B.B.A. Degree Examination, January 2016**  
**(Career Related First Degree Programme Under CBCSS)**  
**Complementary Course**  
**BM 1131: BUSINESS STATISTICS**  
**(2015 Admission)**

Time : 3 Hours

Max. Marks : 80

**SECTION – A**

**Very short answer type**  
**(One word to maximum of 2 sentences)**

1. What is Direct Personal Interview ?
2. Define Statistics.
3. What is Coding ?
4. What is Ogive ?
5. What is Mailed Questionnaire ?
6. What is Pictogram ?
7. What do you mean by Census method ?
8. What is cluster sampling ?
9. Define correlation.
10. What is classical probability ?

**(10×1=10 Marks)**



## SECTION – B

**Short answer**

(Answer **any 8** questions, **not** to exceed **one** paragraph)

11. What are the characteristics of statistics ?
12. What are the properties of arithmetic mean ?
13. What are the properties of good measure of dispersion ?
14. What are the merits and demerits of standard deviation ?
15. Explain Karl Pearson's measure of skewness.
16. Write a note on regression line.
17. What are mutually exclusive events ?
18. Explain addition theorem.
19. Write a note on permutation.
20. Explain linear and non-linear relationships.
21. Write a note on range.
22. What are the properties of variance ?

**(8×2=16 Marks)**

## SECTION – C

**Short essay**

(Answer **any 6** questions, **not** to exceed **120** words)

23. What are the types of correlation ?
24. Explain the various measures of dispersion.
25. From the data given below calculate the G.M.

15, 250, 15.7, 157, 1.57, 105.7, 10.5, 1.06, 25.7, 0.257.



- 26. Explain the measures of Skewness.
- 27. Given the number of families in a locality according to monthly per capita expenditure classes in Rupees as :

<b>Class-interval :</b>	140-150	150 - 160	160 - 170	170 - 180	180 - 190	190 - 200
<b>No. of families :</b>	17	29	42	72	84	107
	200-210	210 - 220	220 - 230	230 - 240	240 - 250	
	49	34	31	16	12	

Calculate Quartile deviation and coefficient of quartile deviation.

- 28. Write a note on events.
- 29. Write a note on limitations of statistics.
- 30. Find the standard deviation of the following distribution :

<b>Age :</b>	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50
<b>No. of Persons :</b>	170	110	80	45	40	35

- 31. Write a note on Standard Deviation. **(6×4=24 Marks)**

**SECTION - D**

**Long essay**

(Answer any two questions)

- 32. Calculate the Karl Pearson's coefficient of skewness from the following data :

<b>Marks</b>	<b>No. of students</b>	<b>Marks</b>	<b>No. of students</b>
Above 0	150	above 50	70
Above 10	140	above 60	30
Above 20	100	above 70	14
Above 30	80	above 80	0
Above 40	80		

33. Ten competitors in a beauty contest are ranked by three judges in the following order:

1 <sup>st</sup> Judge:	1	6	5	10	3	2	4	9	7	7
2 <sup>nd</sup> Judge:	3	5	8	4	7	10	2	1	6	9
3 <sup>rd</sup> Judge:	6	4	9	8	1	2	3	10	5	7

Use the rank correlation coefficient to determine which pair of judges has the nearest approach to common tastes in beauty.

34. Explain the characteristics and functions of statistics.

35. What is sampling? Explain various methods of sampling. (2x15=30 marks)