



Reg. No. :

Name :

First Semester B.B.A. Degree Examination, February 2018
(Career Related First Degree Programme under CBCSS)
Complementary Course
BM 1131 : BUSINESS STATISTICS
(2014-2016 Admissions)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Very short answer type

(One word to maximum of 2 sentences)

1. What is Ogive ?
2. What is Mailed Questionnaire ?
3. What you mean by Histogram ?
4. What is Secondary data ?
5. What is cartogram ?
6. What is snow ball sampling ?
7. What you mean by probability distribution ?
8. What is variance ?
9. What is Tabulation ?
10. What is quartile deviation ?

(10×1=10 Marks)

SECTION – B

Short answer

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

11. Write a note on permutation.
12. What are the properties of variance ?



13. What are the merits and demerits of standard deviation ?
14. What are the properties of arithmetic mean ?
15. Explain linear and non-linear relationships.
16. Write a note on range.
17. Explain addition theorem.
18. Statistics helps in prediction. Explain.
19. What are the properties of mean deviation ?
20. Explain Conditional Theorem.
21. Explain Law of inertia of large numbers.
22. Explain simple random sampling.

(8×2=16 Marks)**SECTION – C****Short essay****(Answer any 6 questions, not to exceed 120 words)**

23. Write a note on events.
24. Explain the difference between correlation and Regression Analysis.
25. What are the types of correlation ?
26. Explain the measures of Skewness.
27. Explain the various measures of dispersion.
28. Calculate the mean for the following frequency distribution :

Sales (in Rs. lakh) :	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of firms	6	5	8	15	7	6	3

29. 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



30. Given the number of families in a locality according to monthly per capita expenditure classes in rupees as :

Class-interval :	140-150	150-160	160-170	170-180	180-190	190-200
No. of families :	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.

31. a) If a person is given one cup of coffee of each of 5 brands and asked to rank these according to preference. How many possible ranking can there be ?
- b) Four strangers board a train in which there are 6 empty seats. In how many different ways can they be seated ?
- c) In how many ways 12 students of MBA (DE) be allotted to three tutorial groups of 2, 4 and 6 respectively.
- d) In how many ways can the letters of the words 'MACMILLAN', 'BANANA' and 'STATISTICALLY' can be arranged ? **(6×4=24 Marks)**

SECTION – D

Long essay

(Answer **any two** questions)

32. Explain the characteristics and functions of statistics.

33. Write a note on correlation analysis.

34. Find the median and mean deviation of the following data :

Size	Frequency	Size	Frequency
0-10	7	40-50	16
10-20	12	50-60	14
20-30	18	60-70	8
30-40	25		

35. Calculate Pearson coefficient of correlation for the following series :

Price (Rs.)	: 22	24	26	28	30	32	34	36	38	40
Demand (Tonnes)	: 60	58	58	50	48	48	48	42	36	32

(2×15=30 Marks)