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Reg. No. :

Name :

**First Semester B.B.A. Degree Examination, January 2013
(Career Related First Degree Programme Under CBCSS)
Group 2(b)**

BM 1131 : BUSINESS STATISTICS

**Common for Core Course BM 1141 2010 Admission/Complementary
Course BM 1131 2011 Admission**

Time : 3 Hours

Max. Weightage : 30

SECTION – A

(4×1=4 Wt.)

This Section consists of **four** bunches of **four** questions **each**. Each bunch carries a weightage of 1. Answer all questions.

I. Choose the most appropriate answer from the following :

1) Measure of dispersion which is most affected most by extreme observations is

- a) Range
- b) Quartile Deviation
- c) Mean Deviation
- d) Standard Deviation

2) Sampling errors are not present in

- a) Simple random sampling
- b) Judgement sampling
- c) Stratified random sampling
- d) Complete enumeration

3) The formula for calculating Karl Pearson's coefficient of skewness is

- a) $\frac{\text{Mean} - \text{Median}}{\text{S. D}}$
- b) $\frac{\text{Median} - \text{Mean}}{\text{S. D}}$
- c) $\frac{\text{Mode} - \text{Mean}}{\text{S. D}}$
- d) $\frac{\text{Mean} - \text{Mode}}{\text{S. D}}$

4) When $\beta_2 = 3$, the curve is

- a) Lepto kurtic
- b) Meso kurtic
- c) Platy kurtic
- d) None of these

P.T.O.



II. Choose the most appropriate answer from the following :

- 5) In _____ the investigators go to the field of enquiry to have on the spot information.
- In investigation through questionnaire
 - In investigation through schedule
 - Indirect oral investigation
 - Direct personal investigation
- 6) The last step involved in statistical enquiry is
- To analyse data
 - To interpret data
 - To write a report
 - To process data
- 7) Classification according to attributes is also known as _____ classification.
- Geographical
 - Chronological
 - Quantitative
 - Qualitative
- 8) Of the following, an example of variable is
- Education
 - Sex
 - Religion
 - Caste

III. Fill in the blanks choosing the suitable words from those given in brackets ;

- 9) Data originally collected for any investigation is called _____
- 10) A _____ is the systematic arrangement of data in rows and columns.
- 11) If Mean < Mode, the distribution is _____ skewed.
- 12) Quartile deviation is _____ measure of dispersion.

IV. Match the following :

- | | |
|---|--|
| 13) Quartile deviation | a) Editing |
| 14) Coefficient of Variation | b) Minimum |
| 15) Sum of absolute deviation from median | c) Maximum |
| 16) Scrutiny of the collected data | d) $\frac{(Q^3 - Q^1)}{2}$ |
| | e) $\frac{\sigma}{\text{mean}} \times 100$ |



SECTION – B

(8×1=8 Wt.)

Answer **any eight** questions. Answer in **one or two** sentences. **Each** question carries a weightage of 1.

- 17) Define Geometric Mean.
- 18) What do you understand by mutually exclusive events ?
- 19) Define Variance.
- 20) Name two uses of range.
- 21) What is a variable ?
- 22) State two limitations of statistics.
- 23) What is Poisson distribution ?
- 24) Name any two sources of secondary data.
- 25) What do you understand by a random experiment ?
- 26) What are the advantages of judgement sampling ?
- 27) Give any two characteristics of a good statistical unit.
- 28) What is dispersion ?

SECTION – C

(5×2=10 Wt.)

Answer **any five** questions. Answer in **one** paragraph. **Each** question carries a weightage of 2.

- 29) Distinguish between diagrams and graphs.
- 30) What are the essential properties of a good average ?
- 31) What do you mean by simple random sampling ? What are its advantages ?
- 32) Distinguish between primary data and secondary data.
- 33) What is a Bar diagram ? Explain the various types of Bar diagram.



34) The following table gives the monthly income of 12 families in a village :

Sl. No.	:	1	2	3	4	5	6	7	8	9	10	11	12
Monthly Income (Rs.)	:	587	693	595	780	840	760	805	907	763	865	768	894

Calculate median.

35) Find the mean deviation from mean and its coefficient for the following values :

25, 63, 85, 75, 62, 70, 83, 28, 30, 12.

36) Find Geometric Mean from the following data :

Size	:	5	8	10	12
Frequency	:	2	3	4	1

SECTION - D

(2×4=8 Wt.)

Answer any two questions. Each question carries a weightage of 4.

37) Define the term statistics. Discuss the functions and characteristics of statistics ?

38) Obtain the quartile measure of dispersion and its coefficient for the data given below :

Age	:	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of Persons	:	15	30	53	75	100	110	115	125

39) The mean and standard deviation of 100 observations were worked out as 40 and 5 respectively by a computer who by mistake took the value 50 in place of 40 for one observation. Recalculate the mean and standard deviation.

BBA