

First Semester B.B.M. Examination, June/July 2011
BUSINESS STATISTICS

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **any five** sub-questions. **Each** sub-question carries **two** marks. **(2×5=10)**

1. a) What is descriptive statistics ?
- b) What does 'Histogram' mean ?
- c) Mention any two properties of Normal distribution.
- d) What is primary data ?
- e) Give the meaning of stratified sampling.
- f) What do you understand by 'pilot survey' ?
- g) What is frequency polygon ?

SECTION – B

Answer **any four** questions. **Each** question carries **five** marks. **(4×5=20)**

2. What is regression ? Explain its uses.
3. What is arithmetic mean ? Mention its properties.
4. Write a note on Type I error and Type II error.
5. Describe various types of surveys.
6. Calculate 'Mode' for the following data

Class Interval (CI) :	53-56	57-60	61-64	65-68	69-72	72 and above
Frequency (f) :	2	4	5	4	4	1

P.T.O.

SECTION – C

Answer **any five** questions. **Each** question carries **ten** marks.

(10×5=50)

7. What are the objectives of classification ? Discuss different methods of classification.
8. Distinguish between primary and secondary data. What precautions must be taken before using the data from a secondary source ?
9. Describe the sources of sampling and also distinguish between sampling and non-sampling errors.
10. The following data represent the monthly income of workers in two factories.

Income	1800-1900	1900-2000	2000-2100	2100-2200	2200-2300	Total
Factory A	24	39	64	36	22	185
Factory B	34	48	75	45	30	232

Compute mean, median and mode for the two factories and interpret the results.

11. The following data gives the hardness (X) and tensile strength (Y) of 7 samples of metal in certain units. Find the linear regression equation of Y on X.

X :	146	152	158	160	162	176	182	186
Y :	72	75	78	80	83	85	86	88

12. What is χ^2 -test of goodness of fit ? What precautions are necessary while applying the test ?
13. What is correlation ? Does correlation signify the existence of cause and effect relationship ?
14. Discuss and explain Bayer's formula with suitable examples.
