Roll No……..….. **Total No. of Printed Pages: 1**
Total No. of Questions: [11]

M. Com. (Semester –1ST)
STATISTICAL APPLICATION IN BUSINESS
Subject Code: MCOM1103
Paper ID: [210103]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It carries 16 marks. It consists of 4 questions of 4 marks each.
2. Section B consist of 4 questions of 8 marks each. The student has to attempt any 3 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(4 marks each)**

Q1. What do you understand by measures of central tendency? Discuss its importance.

Q2. Explain skewness and Kurtosis?

Q3. Discuss when it is appropriate to use a one-sample z-test

Q4. Define "Measures of Dispersion"? What are the important characteristics of standard deviation?

Section – B **(8 marks each)**

Q5. Calculate MEDIAN:

MARKS	0-10	10-20	20-30	30-40	40-50	50-60
NO. OF STUDENTS	4	6	10	15	12	6

Q6. A. Find the probability that a leap year has 53 Sundays.
B. What do you know about Binomial distribution?

Q7. Define "standard deviation"? What are the important characteristics of standard deviation?

Q8. Explain any two each of probability and non-probability sampling methods.

Section – C **(10 marks each)**

Q9. "Correct fact-finding, analysis, and evaluation are major concerns in research." Do you agree with this statement? Provide evidence to back up your response.

Q10. Define the concept time series? Describe models of a time series and how do they differ?

Q11. There is a sample of 30 persons selected as a part of a team surveyed to see how many calls were made by them in a day. Determine the Z-test score for the 3rd person of based on the given responses: 3, 2, 5, 6, 4, 7, 4, 3, 3, 8, 3, 1, 3, 6, 5, 2, 4, 3, 6, 4, 5, 2, 2, 4, 4, 2, 8, 3, 6, 7.