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Total No. of Printed Pages: 1

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**M. Com. (Semester –1<sup>ST</sup>)**  
**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.