

Enrollment No: \_\_\_\_\_

Exam Seat No: \_\_\_\_\_

# C. U. SHAH UNIVERSITY

## Winter Examination-2022

Subject Name : Quantitative Techniques for Management

Subject Code : 5MS01QTM1

Branch: MBA

Semester : 1

Date : 20/03/2023

Time : 10:30 To 01:30

Marks : 70

### Instructions:

- (1) Use of Programmable calculator and any other electronic instrument is prohibited.
  - (2) Instructions written on main answer book are strictly to be obeyed.
  - (3) Draw neat diagrams and figures (if necessary) at right places.
  - (4) Assume suitable data if needed.
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### SECTION – I

**Q-1 Attempt the Following questions. (07)**

- a) What do you mean by statistics in business statistics? **03**
- b) What is the application of statistics in business? **03**
- c) “Statistics are numerical statements of facts in any department of enquiry placed in relation to each other.” **01**  
Who said above statement?

**Q-2 Attempt all questions (14)**

- A Discuss characteristics of statistics. **07**
- B Write note on five stages of statistical investigation. **07**

**OR**

**Q-2 Attempt all questions (14)**

- A Explain Bayes’ Rule. **07**
- B Draw and explain set operations. **07**

**Q-3 Attempt all questions (14)**

- A Write note on types of data. **07**
- B What is transportation problem? Discuss types, methods and basic structure of transportation problem. **07**

**OR**

**Q-3 A What is frequency distribution? Explain types of frequency distribution. 07**

- B Write note on objectives of tabulation. **07**

### SECTION – II

**Q-4 Attempt the Following questions. (07)**

- a) What are the objectives of business statistics? **03**
- b) What is probability? **03**
- c) What is variable? **01**



- Q-5 Attempt all questions (14)**  
**A** Write note on classification of statistics. **07**  
**B** Discuss importance of statistics. **07**

**OR**

- Q-5**  
**A** What are the significance and properties of a good measure of central tendency? **07**  
**B** Explain scatter diagrams of correlation. **07**

- Q-6 Attempt all questions (14)**  
**A** Following is an example of continuous series based on ranges along with their frequencies. Calculate the arithmetic mean: **07**

Items	0-10	10-20	20-30	30-40
Frequency	2	5	1	3

- B** Determine the geometric mean of following set of numbers. **07**  
 1    3    9    27    81

**OR**

- Q-6 Attempt all Questions**  
**A** Calculate the correlation co-efficient of the following: **07**

X	1	3	4	4
Y	2	5	5	8

- B** A researcher has found that there is a co-relation between the weight tendencies of father and son. He is now interested in developing regression equation on two variables from the given data: **07**

Weight of father (in Kg)    69    63    66    64    67    64    70    66    68    67    65    71

Weight of Son (in Kg)    70    65    68    65    69    66    68    65    71    67    64    72

Develop:

- (1) Regression equation of Y on X.  
 (2) Regression equation of X on Y.

