

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

# C.U.SHAH UNIVERSITY

## Winter Examination-2015

**Subject Name: Business Statistics**

**Subject Code: 4MS02BST1**

**Branch: BBA**

**Semester: II Date: 20/11/2015 Time: 10:30 AM To 01:30 PM Marks: 70**

Instructions:

- (1) Use of Programmable calculator & 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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<b>Q-1</b>	<b>Attempt the following questions:</b>	<b>(14)</b>
	a) Define Sample.	01
	b) Which of the following is not a data measurement level? 1. Nominal 2. Ordinal 3. Interval 4. Rational	01
	c) What is a histogram?	01
	d) Calculate the arithmetic mean of the following data: 5,6,7,8,9	01
	e) Give the formula for median of odd number of terms.	01
	f) What is a percentile?	01
	g) Give the formula for interquartile range.	01
	h) Define Skewness.	01
	i) Which events are known as mutually exclusive events?	01
	j) Which of the following is not a statistical test? 1. T- Test 2. Z-Test 3. F-Test 4. G-Test	01
	k) Which are the two different types of statistics?	01
	l) What is the other name of random sampling? 1. Probability 2. Progressive 3. Presumption	01
	m) Which of the following is not a type of regression analysis? 1. Simple 2. Multiple 3. Compound	01
	n) What is the name of all errors other than sampling errors?	01

**Attempt any four questions from Q-2 to Q-8**

<b>Q-2</b>	<b>Attempt all questions</b>	<b>(14)</b>
a.	A data set contains the following values. 5,9,16,17,18	<b>07</b>
	a. Find the range.	



- b. Find the mean absolute deviation.
- c. Find the population variance.
- d. Find the population standard deviation.

b. Calculate the co-efficient of correlation for the following data:

Day	Interest rate	Futures Index
1	7.43	221
2	7.48	222
3	8.00	226
4	7.75	225
5	7.60	224
6	7.63	223
7	7.68	223
8	7.67	226
9	7.59	226
10	8.07	235
11	8.03	233
12	8.00	241

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Q-3

**Attempt all questions**

(14)

Compute the mean, mode, variance and standard deviation on the following sample data.

Class Interval	Frequency
10- under 15	6
15-under 20	22
20-under 25	35
25-under 30	29
30-under 35	16
35-under 40	8
40-under 45	4
45-under 50	2

Q-4

**Attempt all questions**

(14)

- a. Suppose you are testing  $H_0 : p=.17$  versus  $H_a: p>.17$ . A random sample of 550 people produces a value of  $p \hat{=} .465$ . Use  $\alpha=.05$  to test this hypothesis
- b. Write a note on Type I and Type II errors.

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07

Q-5

**Attempt all questions**

(14)

Find the equation of regression line

<b>X</b>	23	29	29	35	42	46	50	54	64	66	67	78
<b>Y</b>	69	95	102	118	126	125	138	178	156	184	176	225



