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.

Q-1		Attempt the following questions:	(14)
	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?	01
		1. T- Test 2. Z-Test 3. F-Test 4. G-Test	
	k)	Which are the two different types of statistics?	01
	l)	What is the other name of random sampling?	01
		1. Probability 2. Progressive 3. Presumption	
	m)	Which of the following is not a type of regression analysis?	01
		1. Simple 2. Multiple 3. Compound	
	n)	What is the name of all errors other than sampling errors?	01
Atten	npt any f	four questions from Q-2 to Q-8	
Q-2		Attempt all questions	(14)
	a.	A data set contains the following values.	07
		5,9,16,17,18	
		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	Futures
	rate	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

Q-3 Attempt all questions

(14)

07

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) 07

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

07

Q-5 Attempt all questions

(14)

Find the equation of regression line

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

Q-6 Attempt all questions

(14)

a. Explain various techniques of random sampling.

07

b. Calculate the first second and third quartiles for the following data

07

Company	Revenue
ABB	10481
ACC	10032
Ambuja	6274
Aurobindo	5107
Zee	2889
Sun	1808
L&T	1578
LMW	1364
Reliance	445
Adani	444
Godrej	370
Bajaj	358
TCS	341
Tisco	258
Titan	229
Bata	215

Q-7 Attempt all questions

(14)

a. Explain various techniques of non- random sampling.

07

b. Compute variance and standard deviation for the following data:

07

Firm	No.of Partners
LMW	2618
Reliance	2118
Adani	2027
Godrej	1535
Bajaj	312
Bata	281

Q-8 Attempt all questions

(14)

a. Determine the value of the coefficient of correlation for the following data:

07

								8		
X	3	4	6	7	11	14	17	21	25	28
Y	15	18	12	13	8	7	7	4	8	6

b. Explain the role of null and alternate hypothesis.

07

