# **C.U.SHAH UNIVERSITY** Winter Examination-2015

### Subject Name : Statistics-II

### Subject Code : 4CO04STA1

#### Semester : 4 Date :21/11/2015 Time :2:30 To 5:30 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:

- When numbers of trials 'n' is very large and 'p' 'q' is very small binomial a) distribution trend is
- What is the value of 'e' in normal distribution? b)
- What are the parameters of normal distribution? **c**)
- **d**) P(- $\infty \le Z \le 0$ ) =\_\_\_\_\_
- Linear equalities and inequalities represent linear programing is called e)
- is very famous for developing methods of linear programing. f)
- **g**) What is the formula of finding mean of Yin stratified random

### sampl i ng?

- h) Parametric is characteristics of \_\_\_\_\_.
- In functional research is the mostly use and famous method. **i**)
- Degrees of freedom of t-test is . **j**)
- **k**) Which level of significance is use for general use.
- Probability of first type of error is denoted by **l**)
- m) What is the table value of Z-test at 5% level of significance?
- In which aria linear programing is useful. n)

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

Q-2		(14)	
	a)	Describe characteristic and use of normal distribution.	
	b)	Explain assumption and limitation of linear programing.	
Q-3		Attempt all questions	(14)
	a)	Give difference between population testing and sample testing.	
	b)	Explain characteristics of good sample.	

Explain characteristics of good sample.

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(14)

**Branch : B.Com (English)** 

Q-4	a) b)	Attempt all question Discuss sampling tec Give merits and dem	<b>ns</b> chniques. erits of random sam	pling.		(14)	
Q-5		Attempt all question	ns			(14)	
-	a)	Explain characteristics of t-test.					
	b)	Explain characteristics of f-test.					
Q-6		Attempt all question	ns			(14)	
c	a)	Explain method of business forecasting.					
	<b>b</b> )	Explain types of error in testing of hypotheses.					
Q-7	,	Attempt all question	ns			(14)	
	a)	Sample	Mean	Variance	Sample Size		

Sample	Mean	Variance	Sample Size
Ι	7	26	10
II	4	10	10

Calculate t-distribution at 5% level of significance .

**b**) In normal distribution mean  $\neq 21.5$  and  $\sigma = 2.5$  find out of following.

(1)P {18 ≤ x ≤ 25}

(2)P {22  $\leq x \leq 28$ }

## Q-8 Attempt all questions

- **a**) Explain importance of normal distribution.
- **b**) Explain graphical method of linear programing.



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