College Name: _____

Student Name: _____   Father's Name: _____

Copy No: _____

KARACHI UNIVERSITY BUSINESS SCHOOL
UNIVERSITY OF KARACHI
FINAL EXAMINATION DECEMBER 2016; AFFILIATED COLLEGES
STATISTICAL INFERENCE; BA (H)–432 (PART B)
BBA – IV

Date: December 24, 2016   **Max. Time: 1 Hrs**
                                               Max. Marks: 30

INSTRUCTIONS:
1. **Attempt any 3 questions. Do not write anything on the question paper.**
2. **TABLES ARE NOT REQUIRED.**
3. **Mobile phones or any other communicating device will not be allowed in the examination room. Students will have to remove the batteries of these devices before entering the examination hall.**

Q1 a) A smoking researcher is interested in estimating the average age when cigarette smokers first began to smoke. Taking random samples of 25 smokers she determined a sample mean 16.8 years and standard deviation of 1.5 years. Construct 95 % confidence interval to estimate population mean age of the onset of smoking.
[Table value = 2.064]

Q1 b) Give reason why coefficient of multiple correlation lies between 0 and 1

Q2 Two groups of people participated in an experiment designed to test the effect of frustration on aggression. Group A has given frustrating puzzle to solve and group B given easy non frustrating version of the same puzzle. Following data represent average mean aggression and standard deviation

Group A   n=40   mean=4.0   Standard Deviation=2.0
Group B   n=40   mean=3.0   Standard Deviation=1.5

Test the hypothesis at 5% level that there is no difference between two groups. What conclusion would you draw?
[Table value = −1.96]

Q3 A sample of 118 college students were asked whether or not they involved in campus activities. Following data were obtained.

Campus Activities	Region			
	East	South	Central	West
Involved	19	25	15	8
Not involved	10	6	15	20

Test at 5% that students' response and region in which their college is located are independent.
[Table value = 7.815]

Q4 a) In a random sample of 600 cars making a right turn at a certain interaction, 157 pulled into the wrong lane. Test the hypothesis that 30% of all drivers make this mistake at 1% level of significance.
[Table value = 2.57]

b) What are the condition for applying t distribution for testing difference of means?

END OF SUBJECTIVE PAPER