

College Name: _____

Student Name: _____ Seat No: _____

Copy No: _____

KARACHI UNIVERSITY BUSINESS SCHOOL
UNIVERSITY OF KARACHI
FINAL EXAMINATION JUNE 2016; AFFILIATED COLLEGES
ADVANCE BUSINESS STATISTICS BA (M) – 601
MBA – III

Date: July 20, 2016

Max Time: 2 Hrs

Max Marks: 30

INSTRUCTIONS:

- 1. Attempt all questions, all carry equal marks.**
- 2. Do not write anything on the question paper.**
- 3. Mobile Phone(s) 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 Differentiate between the following:

1. Efficiency and Consistency property of good estimate.
2. The standard error and standard deviation.
3. Type I error and type II errors.
4. Test of Significant and Test of Hypothesis.
5. Cyclic Variations and Seasonal variations in a time series data.

Q2 Given that $P(Z < 1) = 0.8413$ & $P(Z < 2) = 0.9772$, by using the symmetric property of normal curve calculate

- a) What proportion of a normal distribution lies within one standard deviation of the mean?
- b) What proportion is more than 2.0 standard deviations from the mean?
- c) The temperature (in degree C) follows normal distribution with mean = 1 and variance=1. Calculate the probability that temperature is positive.

Q3 a) A university constructing a hall for deciding about the height of the main gate, a random sample of 250 students were taken and their height(in cm) were recorded, following results were obtained.

$\sum x = 43205$ $\sum x^2 = 7469107$. Construct 99% confidence interval of the mean height of students and decide about the height of the main gate. (Table value ± 3.29)

- b) By using the confidence interval test the hypothesis that $\mu = 185$ cm.

END OF SUBJECTIVE PAPER