APPEARANCE OF MOBILE PHONE(S) / SMART DEVICE(S) SUBJECT TO CONSIDERED AS AN ACT OF CHEATING

College Name: ____

Student Name: ______________________ Seat No: _____________________________

Copy No: _________________________

KARACHI UNIVERSITY BUSINESS SCHOOL
UNIVERSITY OF KARACHI
FINAL EXAMINATION JUNE 2015; AFFILIATED COLLEGES
ADVANCE BUSINESS STATISTICS; BA (M)–601
MBA – III

Revised Date: June 30, 2015 **Max Marks: 30**
Max Time: 30 Min

INSTRUCTIONS:

1. **Attempt all questions. Do not write anything on the question paper.**
2. **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) Give reason why:

i) Why we apply continuity correction in normal approximation to binomial distribution.
ii) In continuous probability distributions probability is taken as areas under the curve.
iii) When variance increases the critical region also increases
iv) If a test is significant at 5% then it will also be significant at 10%
v) In case of Chi square goodness of Observed frequencies and expected frequencies are equal.

Q2) The diameter of bolts produced by a particular machine follow a normal distribution with mean 1.34 cm and standard deviation 0.04 cm. A bolt is rejected if its diameter is less than 1.2 cm and more than 1.4 cm.

a) A bolt is selected at random. Find probability by using $P(Z<-2.5)=0.0062$, the bolt is accepted.
b) If four bolts are selected at random, Calculate the probability than mean diameter is less than 1.35 cm.
c) What happened to the probability of acceptance when sample size increases

Q3) From a large population of students 120 males and 160 females are chosen at random. Their height in meters are noted

	n	Σx	Σx^2
Males	120	198	327
Females	160	248	385

a) Find sample mean and variance.
b) Assume normal distribution with equal pop8lation variances and test the hypothesis that mean height of the male students exceeds the mean height of the female students by less than 0.08 meters
c) Comment on the case, if population variances are not equal.

END OF SUBJECTIVE PAPER