

**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; AFFILIATED COLLEGE JUNE 2015  
BUSINESS STATISTICS; BA (H)-451 (PART B)  
BBA – III**

Date: June 8, 2015

Max. Time: 1 Hr

Max. Marks: 30

**INSTRUCTIONS:**

1. Attempt any 3 questions. Do not write anything on the question paper. **TABLES ARE NOT REQUIRED.**
2. Use of 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) Calculate Coefficient of variation for the following data:  
2,4,6,8,1,9,12

- b) Under what conditions?
- i) Correlation coefficient = Regression coefficient
  - ii) Standard deviation = Mean Deviation = Quartile Deviation = Range
  - iii) Mean = Median = Mode
  - iv) Mean = Median = Mode = GM = HM
  - v) Standard deviation = Mean Deviation = Quartile Deviation = Range = 0

Q2 Following data represents the weight of the box and coins and number of coins in a box.

Number of coins	X	10	20	30	40
Combined Weight of box and coins	Y	312	509	682	865

Given that  $n = 4$   $\Sigma X = 100$   $\Sigma XY = 68360$   $\Sigma X^2 = 3000$

- a) Calculate regression line y on x
- b) Estimate the weight of the coin and the box.

Q3 a) For the following choose the answer and give reason if, in frequency distribution length of each class interval increases then

- i) Number of classes      a) Increases b) decreases c) remains same
- ii) Frequency in each class      a) Increases b) decreases c) remains same
- iii) Accuracy of the data      a) Increases b) decreases c) remains same
- iv) Total frequencies      a) Increases b) decreases c) remains same

- b) For an index number  $\Sigma p_0 q_0 = 2000$   $\Sigma p_n q_0 = 2200$   
Calculate relevant weighted aggregative index number.

Q4 The following table represents the hypertension and smoking habit of 180 individuals.

	Non Smokers	Moderate Smokers	Heavy Smokers
Hypertension	25	35	32
No Hypertension	44	27	17

One persons is picked at random from this group, find the probability that

- i) The person is a heavy smoker
- ii) The person is a non smokers given that the person has no hypertension
- iii) The person is a moderate smokers given that the person has hypertension
- iv) If two persons are picked at random calculate the probability that both are non smokers

**END OF SUBJECTIVE PAPER**