

College Name: _____

Student Name: _____ Seat No: _____

Copy No: _____

KARACHI UNIVERSITY BUSINESS SCHOOL
UNIVERSITY OF KARACHI
FINAL EXAMINATION DECEMBER 2016; AFFILIATED COLLEGES
BUSINESS STATISTICS: BA (M) – 532
MBA – II

Date: January 6, 2017

Max Time: 2 Hrs
Max Marks: 30

INSTRUCTIONS:

1. Attempt all questions. Do not write anything on the question paper.
2. 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 a) The following data represents the running times of films produced by two company.

| | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Company I | 150 | 160 | 145 | 150 | 140 | 155 | 150 | 155 |
| Company II | 170 | 150 | 145 | 160 | 140 | 165 | 155 | 160 |

Calculate which company is more consistent.

- b) Write two properties of
- i) Standard Deviation
 - ii) Coefficient of Variation
 - iii) Coefficient of Correlation
 - iv) Coefficient of Regression
 - iv) Mode

Q2 a) i) The number of ways in which letters of the word INFINITY can be arranged.
ii) How many four digit numbers can be formed from the digits 0,5,6,7,8,9. If each digit is used only once.

b) Calculate the missing values for four examples on the table below

| Sr | Class interval | Mid-point | Class boundary | Width of class |
|----|----------------|-----------|----------------|----------------|
| a. | 0.05—0.09 | ? | ? | ? |
| b. | (-2.5)—(-1.5) | ? | ? | ? |
| c. | 1.984—2.872 | ? | ? | ? |
| d. | ? | 5 | ? | 4 |

Q3 a) The probability that 30% of the people travel by motorcycle wear glasses. From a sample of 8 motor cycle owners, calculate the probability that

- i) Exactly 2 wear glasses
- ii) At-least 6 wear glasses
- iii) More than mean number wear glasses

b) The data shows amount received when Rs 100 is invested in a bank term deposit

| | | | | | | | |
|----------------------------|---|---|----|----|----|----|----|
| Time in years X | 3 | 5 | 8 | 10 | 12 | 15 | 20 |
| Amount received per year Y | 6 | 8 | 12 | 15 | 18 | 25 | 30 |

Data: $\sum X=73$ $\sum Y=114$ $\sum XY=1495$ $\sum X^2=967$ $\sum Y^2=2318$

- i) Find regression line to estimate amount received when deposited for 6 years.
- ii) Interpret a and b.

END OF SUBJECTIVE PAPER