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Student Name: $\qquad$ Seat No: $\qquad$

Copy No: $\qquad$

# KARACHI UNIVERSITY BUSINESS SCHOOL UNIVERSITY OF KARACHI <br> FINAL EXAMINATION JUNE 2017; AFFILIATED COLLEGE BUSINESS STATISTICS; BA (M)-532 <br> MBA - II 

Date: July 6, 2017
Max Time: 2 Hrs
Max Marks: 30

## INSTRUCTIONS:

1. Attempt all questions. Do not write anything on the question paper, EXCEPT the initials mentioned above.
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) Compare the properties of AM and GM.
b) Following data represents the shoe of different sizes sold in a shop.

| Shoe sizes | $3.0-3.9$ | $4.0-4.9$ | $5.0-5.9$ | $6.0-6.9$ | $7.0-7.9$ | $8.0-8.9$ | $9.0-9.9$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No of pair sold | 3 | 6 | 9 | 16 | 30 | 9 | 5 |

Prove that $\mathrm{GM}>\mathrm{HM}$.
Q2 a) Data given below shows the price and quantity of different items for the year 2012 and 2013.

| Items | Price 2012 | Price 2013 | Quantity 2012 | Quantity 2013 |
| :--- | :--- | :--- | :--- | :--- |
| Rice | 55 | 54 | 12 | 12 |
| Fuel | 73 | 72 | 160 | 150 |
| Electricity | 12 | 13 | 425 | 472 |
| .Wheat | 40 | 42 | 11 | 12 |

Calculate Fisher's price index by taking 2012 as base year
b) i) How many four letter words can be formed from the letters of the words "SOCIETY".
ii) How many of them begin with the letter C .

Q3 a) The probability that 40\% of the people buy newspaper "Daily Bulletin" before boarding the train. If there are 10 passenger in a compartment, by using binomial distribution, what is the probability that
i. Exactly 2 bought the Daily Bulletin
ii. At-least 8 bought the Daily Bulletin
iii. Find the mean number of people have the Daily Bulletin
b) On the average there are 4 telephone calls in 10 min comes on a office switch board. What is the probability that there will be
i. No call in 10 min interval
ii. Exactly average number calls in 5 min interval
iii. Exactly 2 calls in 5 min interval
iv. More than 4 calls in 10 min interval

