MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

SECOND YEAR SECOND SEMESTER EXAMINATION FOR DIPLOMA IN BUSINESS ADMINISTRATION

HOMABAY CAMPUS – REGULAR

ADB 0104: BUSINESS STATISTICS

Date: 18th June, 2017   Time: 9.00 – 12.00pm

INSTRUCTIONS:

- Answer Question ONE and any other THREE

QUESTION ONE (25 MARKS)

a) Define the term statistics (1mrk)

b) What is the importance of statistics? (6 mks)

c) Describe factors considered when constructing index numbers (10 mks)

d) What is the difference between Exclusive and Inclusive class intervals (2 mks)

e) Calculate the arithmetic mean, median from the following marks,

80,70,75,85,60,80 (6 mks)

QUESTION TWO (15 MARKS)

The following table shows the daily wages of random sample of supermarket workers

Daily Wages (Kshs)	No of Workers
200 - 399	5
400 - 599	15
600 - 799	25
800 - 999	28
1000 - 1199	20
1200 - 1399	7

a) Required:

   i. Upper Quartile (3mks)

   ii. Lower Quartile (3mks)

   iii. Inter-quartile Range (3mks)

   iv. Quartile Deviation (3mks)

b) Distinguish between primary and secondary data (3mks)

QUESTION THREE (15 MARKS)

The table below shows the marks for 50 students of Maseno University in Business Statistics

Marks	No. of students
100 – 150	5
150 – 200	8
200 – 250	4
250 – 300	6
300 – 350	10
350 – 400	6
400 – 450	5
450 – 500	6

Required:

    i.   The mean mark of the class   (5mks)

    ii.   The median mark of the class   (5mks)

    iii.   The modal mark of the class   (5mks)

QUESTION FOUR (15 MARKS)

a)   A problem in statistics is given to students A, B, C, D and E. Their chances of solving it correctly are, 1/2, 1/3, 1/4, 1/5 and 1/6 respectively. What is the probability that:

    i.   The problem will be solved correctly by all of them   (4mks)

    ii.   The problem is not solved   (3mks)

b) Define the following terms:

    i.   Exhaustive Cases   (2mks)

    ii.   Favorable Cases   (2mks)

    iii.   Mutually exclusive cases   (2mks)

    iv.   Independent events   (2mks)

QUESTION FIVE (15 MARKS)

a) The following information was collected from students of Alliance High School

Marks	frequency
100 – 110	4
110 – 120	6
120 – 130	20
140 – 150	17
150 – 160	11
160 – 170	10

Required:

    i.   Variance   (2mks)

    ii.   Standard deviation   (3mks)

b) Discuss properties of a good measure of variation or dispersion   (10mks)

QUESTION SIX (15 MARKS)

a) With a well labeled diagram, explain two types of skewness (5mks)

b) Explain major methods of data collection.   (10mks)