



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2018/2019 ACADEMIC YEAR
SECOND YEAR FIRST SEMESTER**

**SCHOOL OF BUSINESS AND ECONOMICS
BACHELOR OF SCIENCE (HUMAN RESOURCE
MANAGEMENT)**

COURSE CODE: BHR 200

COURSE TITLE: STATISTICS 1

DATE: 15TH APRIL, 2019

TIME: 14.30PM - 16.30PM

INSTRUCTIONS TO CANDIDATES

Question **ONE** is compulsory

Answer any other **TWO** questions

This paper consists of 4 printed pages. Please turn over.

QUESTION ONE

- a) Define the term 'statistics'. **(2MARKS)**
- b) Discuss the four statistical methods used in statistics. **(8MARKS)**
- c) XYZ ltd are manufacturers of three items; biscuits, bread and cakes.

Their sales for a period of four years were as follows

year	Biscuits ksh '000	Bread ksh'000	Cakes ksh'000
2000	50	80	40
2001	60	100	50
2002	70	110	30
2003	90	120	50

From the above information

- i) Draw a simple bar chat. **(4MARKS)**
- ii) Draw a component bar chat. **(4MARKS)**
- d) The following information was obtained from an investigation

class	Frequency
0-10	5
10-20	10
20-30	15
30-40	8
40-50	7

Use the data above to draw a percentage ogive curve. **(5MARKS)**

- e) Calculate the AM, median, mode and standard deviation given the data below. **(7MARKS)**

Daily wages (Sh)	No. of workers
30-35	5
35-40	8
40-45	10
45-50	6
50-55	3
55-60	2

QUESTION TWO

a) Consider the data below

year	1991	1992	1993	1994	1995	1996
price	8	10	12.5	18	22	25

Compute price index number by taking 1991 as the base year.

(6MARKS)

b) Differentiate between discrete and continuous variables used in statistics.

(2MARKS)

c) Define the term 'skewness' and state three differences between skewness and dispersion.

(4MARKS)

d) Discuss sampling as a method of data collection and in your discussion bring out the advantages and disadvantages of the method.**(6MARKS)**

QUESTION THREE

- a) The following data was obtained in a certain school in Kakamega County.

Mass (kg)	No. of students
60-62	5
63-65	18
66-68	42
69-71	27
72-74	8

Calculate,

- i) Mean. **(3MARKS)**
 - ii) Mode. **(3MARKS)**
 - iii) Median. **(3MARKS)**
 - iv) Standard deviation. **(3MARKS)**
- b) From (a) above, use the data to draw a histogram and an ogive curve. **(6MARKS)**
- c) State two sources of errors in statistics. **(2MARKS)**

QUESTION FOUR

- a) Apart from sampling, discuss other three methods of data collection highlighting their advantages and disadvantages. **(15MARKS)**
- b) Highlight sources of secondary data in statistics. **(5MARKS)**