MAASAI MARA UNIVERSITY

UNIVERSITY EXAMINATIONS 2023/2024
SECOND YEAR FIRST SEMESTER EXAMINATION
FOR
THE DEGREE OF BACHELOR OF SCIENCE ANIMAL HEALTH SCIENCES AND WILDLIFE MANAGEMENT

AHP 2109-1/WRM 2107-1: BASIC BIOSTATISTICS

DATE: 11/12/2023 **TIME: 11.00-13.00pm**

Instructions

A. Answer ANY TEN (10) questions.

B. Illustrate your answers with diagrams and give examples where appropriate.

SECTION A: ANSWER ALL THE QUESTIONS

1. Differentiate the following terms. **(4marks)**

    a) Descriptive from inferential statistics
    b) Control group from effect group
    c) Variable from data
    d) Dependent from Independent variable

2. Discuss any four types of frequency distribution. **(4 marks)**

3. Discuss the six features of a table. **(3 marks)**

4. Discuss the three types of tables used in Biostatistics. **(6 marks)**

5. Briefly discuss any three types of scatter plots. **(6 marks)**

6. Briefly discuss the important features of a map diagram. **(4 marks)**

7. Discuss three methods used in sampling. **(3 marks)**

SECTION B ANSWER ANY TWO QUESTIONS

QUESTION 8 (20 marks)

The table below represents scores of 40 students in a class

72	58	85	73	80	78	94	90
80	76	55	84	54	83	90	45
57	86	75	63	62	60	78	63
62	66	67	61	72	51	62	92
70	98	90	58	58	65	55	70

a) Prepare frequency distribution table, frequency histogram, and frequency polygon for the data set above **(10 marks)**

b) Compute descriptive statistics for the above data **(10 marks)**

Question 9 (20 marks)

a) Discuss any four types of bar charts **(4 marks)**

b) Briefly discuss where bar charts are used appropriately**(4 marks)**

c) The table below shows the nutritional requirements for four patients as prescribed by nutritionist. Compute the appropriate data presentation for the below data **(12 marks)**

Fruits	**Mary**	**Peter**	**Grace**	**John**	**Martha**
Apples	10	8	6	7	9
Hazel nuts	10	14	12	17	12
Kiwi fruits	15	17	19	22	21
Pawpaw	12	11	9	12	15

Question 10 (20 marks)

i. Discuss three types of line graphs **(6 marks)**

ii. Discuss two characteristics a dot plot **(4 marks)**

iii. The table below shows the number of sales for a period of years.

Compute the appropriate line graph for data presentation **(10marks)**

X yr	2005	2006	2007	2008	2009	2010	2011
2yr sales	15	14	27	33	40	40	43