MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)
MAIN CAMPUS
UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR

FIRST YEAR SEMESTER EXAMINATIONS
FOR THE DEGREE OF

DOCTOR OF SCIENCE IN NUTRITION AND DIETETICS

COURSE CODE: PHN 900

COURSE TITLE: ADVANCED BIOSTATISTICS

DATE: Tuesday 26th April 2022   **TIME:** 9.00–12.00 Noon

INSTRUCTIONS: Answer Question ONE and Any other Two. Use illustrations where appropriate

MMUST observes ZERO tolerance to examination cheating

Question One

(a)   Define the following terms and concepts.

   (i)   Probability
   (ii)   Sampling distribution
   (iii)   Data

(iv) Sample mean

(v) Confidence level

(2 marks each = 10 marks)

(b) Why is the course of statistics important to you as a student of Nutrition and Dietetics? **(5 Marks)**

c) Are there any limitations impacting on Research statistics in Nutrition and Dietetics? **(5 Marks)**

(d) State the types, sources, methods of collection and storage of Data in Nutrition and Dietetics. **[10 marks]**

QUESTION TWO (20 MARKS)

a) State the characteristics of Descriptive Research **(2 Marks)**

b) Why do we sample instead of making a complete enumeration of the population? **(2 Marks)**

(b) Distinguish between probability and non-probability sampling **(6 Marks)**

(c) Discuss the dangers of simple random sampling for selecting subjects for research. How can these dangers be eliminated? **(2 marks each = 10 marks)**

QUESTION THREE

(a) Make a clear distinction between the following terms using suitable examples.

(i) Quota and systematic sampling **[2 marks]**

(ii) Skewness and Kurtosis **[2 marks]**

(iii) A qualitative variable and a quantitative variable. **[2 marks]**

(iv) The mean height of 50 male students who showed above average participation in college athletics was 68.2 inches with a standard deviation of 2.5 inches, while 50 male students who showed no