

**UNIVERSITY OF KABIANGA**

**UNIVERSITY EXAMINATIONS**

**2014/2015 ACADEMIC YEAR**

**SECOND YEAR FIRST SEMESTER EXAMINATION**

**FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE**

**COURSE CODE: BIO 223**

**COURSE TITLE: INTRODUCTION TO BIOSTATISTICS AND RESEARCH METHODOLOGY**

**DATE: 3RD SEPTEMBER, 2015**

**TIME: 3.00 P.M-6.00 P.M**

**INSTRUCTIONS TO CANDIDATES:**

Answer **ALL** questions. Total marks (70)

1. What is the difference between the following terms as used in research;
2. Statistics and statistic. (4 marks)
3. Descriptive and inferential statistics. (4 marks)
4. Mutually exclusive and independent events. (4 marks)
5. Random sampling and probability. (4 marks)
6. Formative and summative evaluation. (4 marks)
7. Qualitative and quantitative research paradigm. (4 marks)
8. a) Describe five functions of statistics. (10 marks)

b) State one limitation of statistic. (1 marks)

 3. A survey of household showed the following number of phones per household:

 0 2 2 1 1 2 3 5

 2 2 1 0 1 2 4 2

 0 1 4 4 2 2 0 1

1. Construct a frequency distribution table. (3 marks)
2. State the mode and the median. (3 marks)
3. Calculate the mean number of phones per household. (4 marks)
4. Calculate the variable and standard deviation for the data. (6 marks)
5. a) State **three** properties of research. (3 marks)

b) Describe **three** sources of knowledge. (6 marks)

c) Describe **five** main research processes (stages). (10 marks)