

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2014/2015**

**YEAR III SEMESTER II EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN MEDICAL MICROBIOLOGY**

**SBT 2311: RESEARCH METHODOLOGY AND EXPERIMENTAL DESIGN**

**DATE:DECEMBER 2014 TIME: 2 HOURS**

**INSTRUCTIONS:** Answer question one (compulsory) and any other two questions.

QUESTION ONE

a. Define the term qualitative research and outline four types of questions that it seeks to answer. (5 marks)

b. Outline three conditions that determine whether a problem requires research.

 (3 marks)

c. What information should be included in the statement of a problem in a research proposal? (5 marks)

d. Why is literature review important when preparing a proposal? ( 4 marks)

e. List five characteristics of good research objectives. (5 marks)

f. Describe the following types of variables: Background variables, confounding variables composite variables. (3 marks)

g. Citing specific examples, describe four types of scales of measurements.

 (4 marks)

h. How can sampling error be minimized? (1 mark)

QUESTION TWO

Discuss methods of data collection. (20 marks)

QUESTION THREE

Describe types of study designs. (20 marks)

QUESTION FOUR

To invest in research is to invest for a better future. Does this statement sound true. Justify your answer. (20 marks)