

KISII UNIVERSITY  
UNIVERSITY EXAMINATIONS.  
THIRD YEAR EXAMINATION FOR THE AWARD OF THE  
DEGREE OF BACHELOR OF SCIENCE IN MATHEMATICS  
SECOND SEMISTER 2021/2022

(JANUARY-APRIL EXAMINATIONS)

BACS400: RESEARCH METHODS

STREAM: Y3 S2

TIME: 2 HOURS

INSTRUCTIONS: Answer Question ONE and any other TWO Questions.

Question One

- a) Discuss the steps followed in the research process followed in writing a research proposal. (10 marks)
- b) Discuss five limitations of non empirical sources of knowledge. (10 marks)
- c) Discuss five qualities of a good research. (10 marks)

Question Two

- a) Discuss any FIVE (5) limitations of logic as a source of knowledge. (10 marks)
- b) Discuss any FIVE (5) characteristics of science as a source of knowledge. (10 marks)

Question Three

Using suitable examples differentiate between independent and dependent variables.  
(4 marks)

- a) Highlight the features of a good research design. (6 marks)
- b) Mary is a student who is about to write her research proposal. Explain to her why it is important for her to critically review literature. (10 marks)

Question Four

- a) Discuss FIVE sampling methods that a researcher can use. (10 marks)

- b) Discuss any FIVE (5) ethical aspects to be considered in writing a research proposal. (10 marks)