



W1-2-60-1-6

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
UNIVERSITY EXAMINATIONS 2017/2018
YEAR III SEMESTER 1 EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
IN LAND RESOURCE PLANNING AND MANAGEMENT
ALP 2314: RESEARCH METHODS

DATE: JANUARY 2018

TIME: 2 HOURS

Instructions:

Section A (30 Marks): Answer all the questions

1. Outline the four categories that research objectives fall into (8 Marks)
2. Explain why research is considered to be a process that employs carefully designed procedures and rigorous analysis (4 Marks)
3. Articulate arguments along which significance of research is understood (10 Marks)
4. Distinguish using relevant examples independent, dependent and extraneous variables (8 Marks)

SECTION B (40 Marks): Answer any two questions

5. A researcher is interested in investigating impacts of forest cover on river recharge; a case study of Narok river catchment area. From the above statement:
 - a) Formulate three hypothesis and briefly show how they adhere to the qualities of effective hypotheses (10 Marks)
 - b) Outline an experimental design to test one of the research hypothesis and show how the principles of replication and randomization are factored in (10 Marks)
6.
 - a) Discuss the three criteria used to determine appropriate sample size (12 Marks)
 - b) Outline the sampling protocol (8 Marks)
7.
 - a) A well-planned data collection strategy is critical to obtaining reliable, consistent and useful information about a research problem. Describe the steps involved in data collection (6 marks)
 - b) Data analysis is needed before intelligent and rational discussion and conclusion on a research problem are undertaken. Describe
 - i) The common methods of data analysis (7 marks)
 - ii) The common types of test used in data analysis (7 marks)