



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

THIRD YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE (COMMUNITY RESOURCE MANAGEMENT)

BACHELOR OF ENVIRONMENTAL STUDIES (RESOURCE CONSERVATION)

**ESU 304: RESEARCH METHODS**

**DATE: 24/3/2021**

**TIME: 2.00-4.00 PM**

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## **INSTRUCTIONS:**

**Answer question ONE and any other TWO questions**

### **QUESTION ONE (30 MARKS)**

Differentiate between the following.

- a) Target population and Sample population (6 marks)
- b) Sampling unit and Sampling frame (6 marks)
- c) Correlation and Experimental research (6 marks)
- d) Stratified and Systematic sampling (6 marks)
- e) Validity and reliability (6 marks)

### **QUESTION TWO (20 MARKS)**

- a) Explain the meaning and purpose of research (10 marks)
- b) Discuss the factors to consider to ensure good quality research. (10 marks)

### **QUESTION THREE (20 MARKS)**

- a) Giving examples, discuss the three types of hypotheses. (12 marks)
- b) Discuss the difference between dependent and independent variables and explain how they are used in research designs. (8 marks)

**QUESTION FOUR (20 MARKS)**

Discuss the practical steps of the research process .

**QUESTION FIVE (20 MARKS)**

Discuss the types of data and the scales of measurement considered during data analysis.

**(20 Marks)**