



MACHAKOS UNIVERSITY

University Examinations for 2022/2023 Academic Year

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

SECOND YEAR FIRST SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATION FOR BACHELOR OF ARTS, BACHELOR OF EDUCATION (SCIENCE) AND BACHELOR OF EDUCATION (ARTS)

AGE 200: QUALITATIVE AND QUANTITATIVE TECHNIQUES IN GEOGRAPHY

DATE: 7/3/2023

TIME: 8.30 – 10.30 AM

INSTRUCTIONS: Answer QUESTION ONE and any other TWO QUESTIONS.

Use illustrations where appropriate

QUESTION ONE (30 MARKS)

- (a) Using appropriate illustrations, differentiate the following:
 - i) Continuous and discrete data (4 marks)
 - ii) Systematic and stratified sampling (4 marks)
- (b) Give reasons for using statistics in Geography (4 marks)
- (c) Elaborate on the following terms; stratified sampling, probability and unlikely event (6 marks)
- (d) (i) Examine the strengths and weaknesses of interview as a method of data collection (6 marks)
(ii) Explain the computation of range as a measure of dispersion (2 marks)
- (e) State the characteristics of a Focus Group Discussion (FGD) (6 marks)

QUESTION TWO (20 MARKS)

The following are ages of children in a county primary school

10, 9, 8, 12, 12, 7, 12, 12, 6, 5, 11, 12, 14, 12, 4, 15, 7, 12, 10 and 12

- (a) Explain how you will determine measures of central tendency (10 marks)
- (b) Calculate the range and standard deviation of the dataset (10 marks)

QUESTION THREE (20 MARKS)

- (a) Explain four scales of measurement (8 marks)
- (b) Examine the need for the levels of measurement (6 marks)
- (c) Discuss the assumptions of Probability Theory (6 marks)

QUESTION FOUR (20 MARKS)

- (a)
 - (i) Explain the term hypothesis (6 marks)
 - (ii) Differentiate between null and alternative hypothesis (4 marks)
 - (ii) Elaborate the need for using hypothesis in Geography (4 marks)
- (b) Evaluate the process of hypothesis testing for a 't' test (6 marks)

QUESTION FIVE (20 MARKS)

- (a) Elaborate how you can use questionnaire as a qualitative method (8 marks)
- (b) Compare and contrast between qualitative and quantitative techniques in Geography (12 marks)