

LAIKIPIA



UNIVERSITY

UNIVERSITY EXAMINATIONS

1ST SEMESTER 2025/2026 ACADEMIC YEAR

**EXAMINATION FOR THE POST GRADUATE IN
EDUCATION**

EPS 712: RESEARCH & STATISTICAL METHODS IN EDUCATION

STREAM: R

TIME: 2 HRS

DAY: THURSDAY (8.30-10.30AM)

DATE: 05/02/2026

THIS QUESTION PAPER CONSISTS OF THREE (3 PAGES)

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INSTRUCTIONS:

Answer question ONE and any other TWO questions

SECTION A:**QUESTION ONE (30 Marks)**

1. a. Using the data provided calculate the following:

- | | | |
|------------|---|-----------|
| i. Mean | (8, 40, 30, 6, 8, 15, 20, 18, 4, 16, 5) | (2 Marks) |
| ii. Median | (5, 8, 8, 9, 11, 12, 16, 13) | (2 Marks) |
| iii. Mode | (12, 14, 16, 19, 17, 18, 15, 19) | (2 Marks) |

b. i. Evaluate the causes of sampling errors. (4 Marks)

ii. Discuss the four scales of measurement. (8 Marks)

c. Define and give an example of

i. Non-Parametric Statistics (4 Marks)

ii. Parametric Statistics (4 Marks)

d. Examine any two types of statistical analysis you can apply in research. (4 Marks)

QUESTION TWO (20 Marks)

a. Evaluate any five contributions of statistics to research in education. (10 Marks)

b. Assess the key elements of a good research problem. (10 Marks)

QUESTION THREE (20 Marks)

a. Explain any five ethical considerations that one must adhere to in research (10 Marks)

b. Assess effectiveness of any five sources of educational research information. (10Marks)

QUESTION FOUR (20 Marks)

a. Examine any five types of probability sampling techniques. (10 Marks)

b. Explain why researchers use sampling instead of the whole population. (10 Marks)

QUESTION FIVE (20 Marks)

a. Evaluate the advantages of using a questionnaire for data collection in survey research.

(10 Marks)

b. Critically analyze the different ways of determining the reliability of a data collection instrument.

(10 Marks)