



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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UNIVERSITY EXAMINATIONS 2023/2024

FIRST YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF EDUCATION ARTS

EGE 3151: STATISTICAL TECHNIQUES AND MAP WORK IN GEOGRAPHY

DATE: APRIL 2024

TIME: 2 HOURS

INSTRUCTIONS: Answer Question ONE and any other TWO questions.

QUESTION ONE (30 MARKS)

- a) Explain the following concepts:
- i. Cartography (2 Marks)
 - ii. Draftsmanship (2 Marks)
 - iii. A map (2 Marks)
 - iv. Statistics (2 Marks)
 - v. Statistical Distribution (2 Marks)
- b) Describe THREE major contents of a topographic map. (10 Marks)
- c) Explain the significance of statistics in other fields of development. (10 Marks)

QUESTION TWO (20 MARKS)

You have been contracted by Meru county government to map out the physical and the man-made features in the county.



MUST is ISO 9001:2015 and



ISO/IEC 27001:2013 CERTIFIED

- a) Explain how you will use colours to bring out the features on the map. (10 Marks)
- b) Describe any FIVE methods used to depict the relief features of Meru County. (10 Marks)

QUESTION THREE (20 MARKS)

- a) Examine the principles of map thematic reading. (12 Marks)
- b) Distinguish between probability and non-probability sampling. (8 Marks)

QUESTION FOUR (20 MARKS)

- a) Explain the usefulness of measures of dispersion in various fields. (6 Marks)
- b) Provide an account of the history of maps up to date. (14 Marks)

QUESTION FIVE (20 MARKS)

Leparan observed the amount of time taken by students to walk from the university gate to the lecture halls and tabled the following report:

Time taken(mins)	1-10	11-20	21-30	31-40	41-50
No. of students	8	14	12	9	7

- a) Use the table to calculate:
- i. Mean (3 Marks)
 - ii. Mode (3 Marks)
 - iii. Range (3 Marks)
 - iv. Inter-quartile range (7 Marks)
- b) Describe the merits of each of the above measures. (4 Marks)

