



TECHNICAL UNIVERSITY OF MOMBASA

School of Humanities and Social Sciences

Department of HOSPITALITY & Tourism MANAGEMENT

UNIVERSITY EXAMINATION FOR THE DEGREE OF:
BACHELOR OF SCIENCE IN TOURISM MANAGEMENT (BSTM/SEP2023)
ECV 4240: GEOSPATIAL INFORMATION SYSTEM (GIS)

END OF SEMESTER EXAMINATION

SERIES: APRIL 2025

TIME: 2 HOURS

DATE: Pick Date **APRIL 2025**

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt Choose instruction.

Do not write on the question paper.

SECTION A (Answer all the questions)

30 POINTS

QUESTION ONE

- a. Explain the following concepts as applied in GIS (10 marks)
 - i. Geo-referencing
 - ii. Heads –up digitizing
 - iii. Raster Model
 - iv. Ground Control Point
 - v. Vector data model
- b. Explain FIVE functions of a GIS (10 marks)
- c. Describe FIVE factors that has led to increasing use of GIS application in management of tourism resources globally (10 marks)

SECTION B (Answer only TWO questions)

QUESTION TWO

- a. Discuss the advantages of a Raster data models as used in GIS (10 marks)
- b. Using hand drawn illustration describe three geometric presentation of geographic features using vector data model (10 marks)

QUESTION THREE

- a. Describe the three ways for presenting Symbols in QGIS (10 marks)
- b. Explain FIVE sources of Data used in GIS (10 marks)

QUESTION FOUR

- a. Explain SEVEN steps of spatial analysis (14 marks)
- b. Describe THREE (3) uses of GIS in the context of the tourism industry (6 marks)

QUESTION FIVE

- a. Explain FIVE elements of a digital Map produced by a GIS (10 marks)
- b. Explain the purposes of spatial modelling (10 marks)