MACHAKOS UNIVERSITY

University Examinations for 2023/2024 Academic Year

SCHOOL OF AGRICULTURE, ENVIRONMENT AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENTAL SCIENCES

THIRD YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (HOSPITALITY AND TOURISM MANAGEMENT)

BTM 302: GEOGRAPHIC INFORMATION SYSTEM

DATE: **TIME:**

Instructions: Answer question ONE and any other TWO questions

QUESTION ONE (30 MARKS)
a)   Explain the following:
    i.   Geographic Information System   (2 marks)
    ii. Topology   (2 marks)
    iii. Spatial entities   (2 marks)
    iv. Spatial database management system   (2 marks)
    v. Attribute data   (2 marks)

b)   Explain the main data management and analysis procedures relevant in GIS   (10 marks)

c)   Discuss the main components that should be considered in development of a GIS (10 marks)

QUESTION TWO (20 MARKS)
a)   Explain the main types of data used in GIS   (10 marks)
b)   Discuss the different levels of data classification applicable in designing maps to show tourist destinations   (10 marks)

QUESTION THREE (20 MARKS)
Discuss the main barriers in the development and implementation of GIS in the hospitality and tourism sector in Kenya

QUESTION FOUR (20 MARKS)
Discuss the spatial data pre-processing techniques you would adopt to help your county make most efficient decisions in the terms of tourism development

QUESTION FIVE (20 MARKS)
Discuss the benefits that the hospitality and tourism sector in Kenya can derive from a computer-based spatial data management system