



(Knowledge for Development)

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KIBABII UNIVERSITY

(KIBU)

**UNIVERSITY EXAMINATIONS
2019/2020 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
FOURTH YEAR SECOND SEMESTER
EXAMINATIONS**

**FOR THE DEGREE OF
(INFORMATION TECHNOLOGY)**

COURSE CODE : BIT 424

COURSE TITLE : GEOGRAPHIC INFORMATION SYSTEMS

DATE: 12/11/2020

TIME: 2.00 P.M. – 5.00 P.M.

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSORY)

[30 MARKS]

- a. Define the following terms used in GIS
 - i. Overlaying [2 Marks]
 - ii. Attribute [2 Mark]
- b. Using relevant example, describe the significance of the use of a GPS in a geographical research [5 Marks]
- c. Distinguish between a passive and active sensor [6 Marks]
- d. Discuss the role of GIS and Remote Sensing in improving Kenyans economy [15 Marks]

QUESTION TWO

[20 MARKS]

- a. Define the term GIS [5 Marks]
- b. Using relevant examples, discuss any three data analysis operations carried out by GIS [15 Marks]

QUESTION THREE

[20 MARKS]

Describe the following concepts

- a) Remote Sensing [5 Marks]
- b) Vector based verses Raster Based data Storage [6 Marks]
- c) Describe the processes involved in a supervised classification of an image [9 Marks]

QUESTION FOUR

[20 MARKS]

Discuss the challenges facing the use of Remote Sensing and GIS in the Kenya [20 Marks]

QUESTION FIVE

[20 MARKS]

- a) Describe any basic components of GIS [10 Marks]
- b) Describe any five sources of spatial data that can be used in GIS [10 Marks]