UNIVERSITY OF FORT HARE

GEOGRAPHIC
INFORMATION SYSTEMS
FOR HUMAN SETTLEMENT
HGS 311

SUPPLEMENTARY EXAMINATIONS

JANUARY

2019

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Time: 1 Hour 30 Minutes

Subject: Geographic Information Systems

Marks: 50

This paper consists of 3 pages including the cover page

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INSTRUCTIONS

Read all questions carefully
Answer ALL questions.
QUESTION 1

Explain what you understand GIS to be.

QUESTION 2

(a) Briefly explain where buffering can be used. (2)
(b) What are the basic criteria that raster layers must meet in order to carry out a raster overlay operation? (3)

QUESTION 3

List four elements of your choice that can assist one in visual interpretation of images such as aerial photographs and satellite images.

QUESTION 4

Giving an example for each, how is a GIS used to answer the question of "What is, Where, and Why"?

QUESTION 5

(a) What is the purpose of maps in GIS? (3)
(b) List THREE criteria usually used for classifying maps. (3)
(c) Distinguish between Large-scale maps and small-scale maps. (4)
(d) List TWO types of maps of your choice. (2)

QUESTION 6

For a GIS to be effective there are several components that work together to achieve the desired results. Identify FIVE components and explain how they contribute to the effectiveness of a GIS.
Give **TWO** examples of each of the following:

a) Continuous thematic map. (2)
b) Discrete thematic map. (2)
c) Attribute data for a layer representing streets in East London. (2)
d) Attributes data for a layer representing towns in Eastern Cape. (2)
e) Quantitative attribute data for a river. (2)

*End of Paper*