

UNIVERSITY OF FORT HARE
FACULTY OF SCIENCE AND AGRICULTURE
DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL SCIENCE

ECONOMIC GEOGRAPHY, GEOMORPHOLOGY, STATISTICS FOR
GEOGRAPHERS, GEOGRAPHICAL INFORMATION SYSTEMS AND
REMOTE SENSING

GEG 221

DEGREE SUPPLEMENTARY EXAMINATIONS

JANUARY

YEAR: 2019

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Time: 3 hours
Subject: GEG 221
Marks: 100

This paper consists of 4 pages including the cover page

Internal Examiners

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INSTRUCTIONS

- (1) Answer Questions from all three Sections (A, B, & C)
- (2) Answer ALL questions from Section A.
- (3) Answer Two (2) questions from Section B.
- (4) Answer One (1) question from Section C.
- (5) Start the answer to each question on a new page.

SECTION A: GIS AND REMOTE SENSING

ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION 1

1. As a GEG221 student, explain with examples at least 3 GIS categorisations you would explore in area locational global visualisation. (6)
2. State 3 conditions that would affect different data sets layers alignment during spatial analysis? (6)

[12]

QUESTION 2

1. Briefly describe the benefits of integrating diverse information within a GIS. (4)
2. Briefly describe the following;
 - i) Raster data (4)
 - ii) Vector data (4)
3. Convert the listed points from degrees-minutes-seconds (DMS) to decimal degrees (DD) using the following formula: $DD = D + M/60 + S/3600$. (9.3)

(21.3)

[33.3]

SECTION B: ECONOMIC GEOGRAPHY

Compulsory question

QUESTION 3

1. Differentiate between Structuralism and Modernisation theories. (8)
2. Why Non-Governmental Organisations (NGOs) have been regarded as appropriate agents for development? (3.5)
3. Explain four limitations that may hinder their (NGOs) effectiveness. (4)

[15.5]

Answer ONE question from this Section

Either Question 4 or 5

QUESTION 4

1. 'Rethinking development is concerned with thinking about power relations bound up with development (Radcliffe, 2005, pp. 200)'.

Discuss this statement with reference to:

- i. The power of writing and
- ii. The power of state.

[18]

OR

QUESTION 5

- 1. Outline and describe three landscapes of consumption. (3)
- 2. Briefly explain risks the governments face when they attempt to regulate international finance systems. (3)
- 3. Identify a potential business of your own and explain the circuit of capital. (12)

[18]

[33.5]

SECTION C: GEOMORPHOLOGY

Answer ONE Question from this Section

QUESTION 6

- 1. Explain how eolian erosion and transportation processes are similar to fluvial erosion and transportation processes, and how do they differ? (10)
- 2. Explain why wind is a weaker geomorphic agent than running water in the desert in sculpturing the desert landscape. (10)
- 3. Describe the components of stream load, and how these components vary with stream discharge. (10)
- 4. Explain how plants can stabilize dunes. (3½)

[33½]

QUESTION 7

1. In what way does climate and vegetation affect landforms in the desert landscape? 10)
2. Explain the factors which influence stream/river response to rainfall. (10)
3. With specific examples, explain how land development influences the coefficient of runoff. (10)
4. Explain why arid/desert streams are commonly braided. (3½)
[33½]