

University of Fort Hare
Faculty of Science and Agriculture
School of Biological and Environmental Sciences
Department of Geography and Environmental Science

Supplementary Degree Examination: July/August 2018

Course Code: GEG 211

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Total Marks: 100

Time: 3 Hours

- Instructions:** (1) Answer Five (5) questions
- (2) Answer one (1) question from each Section
- (3) All questions are of equal value
- (4) Start the answer to each question on a new page
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SECTION A
POPULATION GEOGRAPHY

Answer ONE question from this section

Question 1

1. Population growth and distribution

Differentiate between the following concepts:

- (1) Refugees and Internal Displaced Persons
- (2) Ecumene and Non-Ecumene
- (3) Physiological and nutritional/agricultural density (6)

2.

- 1. With examples describe 'environmental resistance'. (3)
- 2. Discuss the role of industrial revolution on world's population growth. (6)

- 3. The Sustainable Development Goals (SDG) aim to build on ensuring that there is an end to discrimination against women and girls everywhere by 2030'. Describe how the Republic of South Africa advanced good health and well being (SDG 3). (5)

[20]

Question 2

- 1. Is the transitional demographic model universally applicable? Explain your answer. (4)
- 2. Explain why is it difficult to cut a clear/sharp distinction between categories of migration (6)
- 3. Discuss the South African policies enshrined in the constitution that ensure women's effective participation and actively address entrenched discriminatory stereotypes and inequalities. (10)

[20]

SECTION B

PEDOLOGY

Answer ONE question from this section

Question 3

1. What is soil catena? With the aid of a diagram, explain this soil condition. (5)
 2. What factors are involved in the formation of soils? Briefly explain how each factor influence soil characteristics. (15)
- [20]**

Question 4

1. Explain the major functions of soil. (10)
 2. Differentiate between Soil Geography and Pedology. (10)
- [20]**

SECTION C

ENVIRONMENTAL STUDIES

Answer ONE question from this section

Question 5

- 1) Environmental Management is the key to sustainable development.
Briefly explain any 4 (four) broader objectives of environmental management. (4)
 - 2) The environment is a broad concept with ecosystem services and products which are derived from our natural resources. Such benefits are dependent on the full functioning of the entire bio-sphere and lithosphere's essential cycles. Briefly discuss each of the following:
 - a) The Water Cycle,
 - b) Nitrogen Cycle, and
 - c) The Carbon Cycle. (12)
 - 3) Give 4 (four) essential elements of natural resource management (4)
- [20]**

Question 6

1. Both governments and civil society are spending vast amounts of money protecting animals and their habitat. This money could be better spent on pressing fundamental issues like poverty and health care. Using ecosystems based principles, to what extent do you agree? (10)

 2. Global Warming is one of the biggest threats to our environment. What causes global warming? Considering the four spheres of the biophysical nature of life on earth, what solutions are there to this problem? (10)
- [20]**

SECTION D

SETTLEMENT GEOGRAPHY

Answer ONE question from this section

Question 7

Rural Geography

1. What do you understand by the following concepts:
(1) Rural Commodification
(2) Post-productivism (2)

2. Despite the transformation of the rural, it is still marked with groups of marginalised people or social problems.
Identify and explain three of the rural 'hidden others'. (3)

3. Briefly explain why is it difficult to differentiate between rural and urban settlements. (4)

Urban Forms

- 1 Describe de-industrialisation (1)
 - 2 With reference to examples, explain fully, two advantages and two disadvantages of de-industrialisation. (4)
 - 3 Discuss how gated communities lead to residential segregation and exclusion of other population groups (6)
- [20]**

Question 8

Re-organization of space in South Africa in the pre-and post-apartheid periods

1. Discuss the institutional challenges Visser (2009) identified from the South African Local Government.

In your discussion provide the possible solutions. **[20]**

**SECTION E
CLIMATOLOGY**

Answer ONE question from this section

Question 9

Clouds with temperature greater than 0° degrees Celsius and with condensation particles consisting of liquid water are defined as warm clouds. Clouds with temperature lower than 0° Celsius are called cold clouds. Describe warm and cold clouds as well as the formation and growth processes of cloud droplets in warm clouds and the growth processes of ice particles in cold clouds. **[20]**

Question 10

Using Boyle's Law, Charles' Law and the equation of state, describe how temperature, density, volume and pressure are related. **[20]**