

UNIVERSITY OF SWAZILAND
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND PLANNING
SUPPLEMENTARY EXAMINATION, JULY 2017
B.A., BASS, B. Ed. (FT/PT)

TITLE OF PAPER: BIOGEOGRAPHY

COURSE NUMBER: GEP312

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS: 1. ANSWER THREE QUESTIONS
2. QUESTION 1 IS COMPULSORY
3. ILLUSTRATE YOUR ANSWERS WITH
EXAMPLES AND CLEARLY DRAWN DIAGRAMS
WHERE APPROPRIATE

ALLOCATION OF MARKS: QUESTION 1 (COMPULSORY) CARRIES
40 MARKS WHILE THE REST CARRY 30
MARKS EACH

THIS QUESTION PAPER SHOULD NOT BE OPENED UNTIL PERMISSION IS
GRANTED BY THE INVIGILATOR.

GEP312: BIOGEOGRAPHY – JULY 2017

SECTION A: COMPULSORY

QUESTION 1

- a) Explain the properties of soil orders used in soil taxonomy. (20 marks)
- b) Discuss the role of human beings in modifying soil properties. (20 marks)
- (40 Marks)**

SECTION B: ANSWER ANY TWO QUESTIONS

QUESTION 2

- a) Distinguish between gaseous and sedimentary cycling of nutrients in an ecosystem. (5 marks)
- b) Using the nitrogen cycle as an example, discuss the effects of anthropogenic activities on plant distribution in an ecosystem. (25 marks)
- (30 Marks)**

QUESTION 3

- a) Compare and contrast allogenic and autogenic succession. (8 marks)
- b) Discuss the theories of ecological succession and development of a climax community. (22 marks)
- (30 Marks)**

QUESTION 4

Discuss how moisture affects ecosystem characteristics and development. **(30 Marks)**

QUESTION 5

- a) Using examples, explain intra-specific interactions among organisms in an ecosystem. (15 marks)
- b) Discuss the factors limiting the development of forests on the Earth's surface. (15 marks)
- (30 Marks)**