



(Knowledge for Development)

**KIBABII UNIVERSITY**

**2020/2021 ACADEMIC YEAR**

**FOURTH YEAR**

**SPECIAL/SUPPLEMENTARY EXAMINATION**

**FOR THE DEGREE OF BEE AND BED**

**COURSE CODE: ESM 410**

**COURSE TITLE: ENVIRONMENTAL EDUCATION**

**DATE: 17/1/2022**

**TIME: 8:00 AM-10:00 AM**

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### **INSTRUCTIONS TO CANDIDATES**

Answer **THREE** questions: Question **ONE** and any other **TWO** TIME:  
2 Hours

The university observes **ZERO** tolerance to examination cheating.

*This paper consists of 3 printed pages. Please turn over.*

### QUESTION ONE(30 MKS)

- a) List **FOUR** problems which result from resource destruction by overuse and misuse (4 Marks)
- b) Briefly describe the effect of the following emission into the atmosphere
- i. Sulphur particles (2 marks)
  - ii. Chlorofluorocarbons (CFCs) (2 marks)
  - iii. Carbon (iv) oxide (2 marks)
- c) Name **THREE** components of the biosphere (3 Marks)
- d) Outline **FOUR** environmental topics/sub topics in your teaching subject that a teacher may use when implementing environmental education in secondary schools (4 Marks)
- e) State **THREE** most effective tools that can be used in solving environmental problems (3 marks)
- f) Differentiate between a species and a community (4 Marks)
- g) i) What do you understand by the term Natural resources (2 Marks)
- ii) Outline **TWO** ways in which Natural resources are classified (2 Marks)
- h) State **TWO** reasons why nutrients are cycled and recycled in an eco-system (2 Marks)

### QUESTION TWO (20 MKS)

- a) Briefly discuss **FIVE** teaching/learning activities that you would use to promote environmental actions and responsible behavior among your students (10 Marks)

- b) Outline **FIVE** advantages of using interdisciplinary approach of teaching environmental education in Kenyan schools  
(10 Marks)

### QUESTION THREE (20 MKS)

- a) State and explain **FIVE** current environmental issues of concern in Kenya  
(10 Marks)
- b) Discuss **five** guiding principles of environmental education as adopted at the Tbilisi Conference (10marks)

### QUESTION FOUR (20 MKS)

- a) Describe the main contribution of the following international treaties towards a better balanced and clean environment
- Stockholm declaration (4 Marks)
- Belgrade charter (4 Marks)
- Tbilis declaration (4 Marks)
- b) Outline **EIGHT** possible remedies to reduce emission of greenhouse gases to the atmosphere (8 Marks)

### QUESTION FIVE (20 MKS)

- a) Explain the concept of climate change and the environmental problems associate with climate change.  
(10 Marks)



b) Giving relevant examples, discuss the environmental impacts caused by industry

(10 Marks)