

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATION

RESIT /SPECIAL EXAMINATION

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE
IN ENVIRONMENTAL SCIENCE

ENSC 101: PRINCIPLES OF ENVIRONMENTAL SCIENCE

STREAMS:

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 03/11/2021

11.30 A.M – 1.30 P.M

INSTRUCTIONS:

- Answer all questions in SECTION A and any other two questions in SECTION B
- Do not write anything on the question paper

SECTION A: (30 MARKS)

- 1) Differentiate the following terms as used in environmental science
 - a) Climatological disasters and meteorological disasters (2 marks)
 - b) Conservation and preservation (2 marks)
 - c) Renewable and non-renewable resources (2 marks)
- 2) Give an account of the temperature inversion in the atmosphere (6 marks)
- 3) Highlight six ways in which vehicular pollution in Kenya can be controlled (6 marks)
- 4) Explain four socio-economic constraints to sustainable development in African countries (6 marks)
- 5) Explain the main ecosystem services that are stipulated in the Millennium Ecosystem Assessment of 2005 (6 marks)

SECTION B (40 MARKS)

- 6) (a) Describe the occurrence and impacts of the following natural disasters (10 marks)
 - (i) Tsunami
 - (ii) Tornado
 - (iii) Heat wave

(iv) Volcanic

- (b) Describe the SMUG model for hazard prioritization (10 marks)
- 7) (a) Describe the importance of forest resources in Kenya (10 marks)
- (b) Explain five threats that are facing these forest resources (10 marks)
- 8) (a) Describe the values of biodiversity that should form the basis of biodiversity conservation initiatives (12 marks)
- (b) Explain four major threats to biodiversity in Kenya (8 marks)
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