

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE OF
BACHELOR OF SCIENCE (ENVIRONMENTAL SCIENCE)**

ENSC 102: INTRODUCTION TO PHYSICAL ENVIRONMENT

STREAMS: BSC. (ENSC) Y1S2

TIME: 2 HOURS

DAY/DATE: MONDAY 7/4/2014

11.30 A.M. – 1.30 P.M.

INSTRUCTIONS:

Answer all questions in section A and any two in section B

SECTION A: (30 MARKS)

1. Briefly discuss geostrophic winds [3 marks]
2. Differentiate a graben from a horst [3 marks]
3. Briefly describe the formation of deep ocean current [4 marks]
4. Differentiate the process of hydrolysis from hydration [4 marks]
5. Briefly describe the major features of intrusive volcanicity [5 marks]
6. Almost 100% of the energy on earth is solar in origin. Briefly account for the energy received from the sun as it enters the earth's atmosphere to the earth's surface [5 marks]
7. Briefly describe the major ecosystems as they are distributed from the north pole to the equator [6 marks]

SECTION B:

8. a) Discuss the factors that affect denudation [10 marks]
- b) Discuss the role living organisms in the process of denudation [10 marks]

9. a) Using an illustration, discuss the primary global pressure systems and the atmospheric circulation [10 marks]
- b) Describe tropical moist climates (A) [10 marks]
10. using an illustration, discuss the structure of the atmosphere [20 marks]
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