

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF BACHELOR OF SCIENCE IN BIOLOGY

ZOOL 311: FRESHWATER BIOLOGY

STREAMS: B.SC. (BIO) Y3S1

TIME: 2 HOURS

DAY/DATE: THURSDAY 06/12/2018

2.30 P.M – 4.30 P.M

INSTRUCTIONS:

- 1. Answer all question in section A and any two from section B**

SECTION A: 30 MARKS

1. State the unique properties of water that make it a suitable habitat for aquatic organisms. [5 marks]
2. From a fresh water ecologists point of review explain the difference between lakes and rivers. [4 marks]
3. Write explanatory notes on the following terms;
 - (a) Function feeding guilds in streams. [2 marks]
 - (b) Eutrophication process. [2 marks]
 - (c) Zonation of fresh water lakes. [2 marks]
4. Explain adaptations of hyporheic fauna to ground water habitats. [4 marks]
5. Describe with the aid of a diagram energy and matter flow in a lacustrine environment. [5 marks]
6.
 - (a) State the ecological importance of wetlands. [4 marks]
 - (b) Write explanatory notes on holomictic and meromictic lakes. [4 marks]

SECTION B (40 MARKS)

7. Discuss the origin and distribution of lakes. [20 marks]
 8. Give an account of variations of physical and chemical parameter of water from a river source to the mouth. [2 marks]
 9. Discuss the causes and remedies of pollution of fresh water ecosystems. [2 marks]
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