

CHUKA



UNIVERSITY

**SUPPLEMENTARY/ SPECIAL EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF  
BACHELOR OF EDUCATION SCIENCE, BACHELOR OF SCIENCE**

**BOTA 232: PHYCOLOGY**

**STREAMS: BED (SCI), BSC**

**TIME: 2 HOURS**

**DAY/DATE: TUESDAY 02/02/2021**

**11.30 AM – 1.30 PM**

**INSTRUCTIONS:**

- Answer all questions in section A and any two in section B
- Do not write anything on the question paper
- Use illustrations where appropriate to enhance your answer.

**SECTION A (30 MARKS)**

1. Define the following terms. [3 marks]
  - a. Monoecious
  - b. Anisogamy
  - c. Algal bloom
2. Discuss conditions for sexual reproduction. [4 marks]
3. Classify algae based on thallus organization. [4 marks]
4. Describe types of food reserves in algae. [4 marks]
5. Discuss the role of algae in human health. [3 marks]
6. Describe the characteristics of euglenophycophyta [5 marks]
7. Discuss algae distribution in the ecosystem. [3 marks]
8. Account for pigmentation in algae and cyanobacteria. [4 marks]

**Section B (40 Marks)**

9. Discuss economic importance of algae to human welfare. [20 marks]
10. Discuss vegetative and asexual reproduction in algae. [20 marks]
11. Describe various morphological features exhibited by algae. [20 marks]