

UNIVERSITY

## UNIVERSITY EXAMINATIONS

## **RESIT/SPECIAL EXAMINATION**

## EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE

## **BOTA 232: PHYCOLOGY**

CHUKA

| STREAMS: BSC                                                                                                                                                                                                                                           | TIME: 2 HOURS            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| DAY/DATE: TUESDAY 02/11/2021                                                                                                                                                                                                                           | 11.30 A.M – 1.30 P.M.    |
| <ul> <li>INSTRUCTIONS:</li> <li>Answer all questions in section A and any two in section B</li> <li>Do not write anything on the question paper.</li> <li>Use illustrations where appropriate to enhance your answ<br/>SECTION A (30 MARKS)</li> </ul> |                          |
| 1. Define the following terms.                                                                                                                                                                                                                         | [3 marks]                |
| <ul> <li>a. Monoecious</li> <li>b. Anisogamy</li> <li>c. Algal bloom</li> <li>2. Discuss conditions for sexual reproduction.</li> </ul>                                                                                                                | [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.                                                                                                                                                                                                          | [4 marks]                |
| 6. Describe the characteristics of euglenophycophyta                                                                                                                                                                                                   | [4 marks]                |
| 7. Discuss algae distribution in the ecosystem.                                                                                                                                                                                                        | [3 marks]                |
| 8. Account for pigmentation in algae and cyanobacteria.                                                                                                                                                                                                | [4 marks]                |
| <ul> <li>Section B (40 Marks)</li> <li>9. Discuss economic importance of algae to human welfare.</li> <li>10.Discuss vegetative and asexual reproduction in algae.</li> </ul>                                                                          | [20 marks]<br>[20 marks] |

 11. Describe various morphological features exhibited by algae.
 [20 marks]