



# **MAASAI MARA UNIVERSITY**

## **REGULAR UNIVERSITY EXAMINATIONS 2018/2019 ACADEMIC YEAR**

### **THIRD YEAR SECOND SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE (BOTANY)**

**COURSE CODE: BOT 3213  
COURSE TITLE: PHYCOLOGY**

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**DATE: 29<sup>TH</sup> APRIL, 2019**

**TIME: 1100 - 1300HRS**

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Instructions

Answer **ALL** questions in section **A** and any other **TWO** selected from section **B**. Illustrate your answers with diagrams and give examples where appropriate.

**SECTION A (30 MARKS): ANSWER ALL QUESTIONS**

1. Give the general characteristics of Cyanophyceae (3 mks)
2. Describe the factors that contributed to the widespread distribution of Cyanobacteria (3 mks)
3. Distinguish between order Oscillatoriales and Order Nostocales (3 mks)
4. Give the advantages that multicellular algae have over unicellular algae (3 mks)
5. Describe the modes of Asexual reproduction in Chlorophyta (3 mks)
6. Differentiate between isogamy, anisogamy and oogamy (3 mks)
7. Describe the Xanthophytic flagella (3 mks)
8. Describe asexual reproduction in diatoms (3 mks)
9. Using illustrations distinguish between Nitzshia, Cyclotella and Cymbella (3 mks)
10. Describe chromatin adaptation in Rhodophyta (3 mks)

**SECTION B (40 MARKS): ANSWER ANY TWO QUESTIONS**

11. Give a detailed account of the economic importance of algae and cyanobacteria. (20 mks)
12. Discuss the diversity of thallus organization in Phycophyta. (20 mks)
13. Discuss toxins production in cyanophytes. (20 mks)
14. Discuss the development of research in Phycology in Kenya. (20 mks)

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