



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES

**UNIVERSITY RESIT EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
BIOLOGICAL SCIENCES**

3rd YEAR 1st SEMESTER 2019/2020 ACADEMIC YEAR

MAIN CAMPUS - REGULAR

COURSE CODE: SBI 3317
COURSE TITLE: Phycology
EXAM VENUE: STREAM: (BSC. BIO)

DATE: EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in Section A and Any two questions in Section B**
 - 2. Candidates are advised not to write on question paper**
 - 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**
-

SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)

1. Differentiate between hypnospores and Autospores. (3 marks)
2. Draw a well labeled diagram of a chlamydomonas. (3 marks)
3. Name the three main components of diatomite. (3 marks)
4. Outline any three classes of the lithic algae. (3 marks)
5. Describe siphonous morphology in *Vaucheria*. (3 marks)
6. Outline the advantages of using algae as a source of biofuel. (3 marks)
7. Differentiate benthic algae from phytoplanktons in aquatic ecosystems. (3 marks)
8. Describe symbiosis in algae. (3 marks)
9. Describe phycobilisomes in cyanobacteria. (3 marks)
10. Describe autocolony formation in coenobia. (3 marks)

SECTION B: ESSAY QUESTIONS (40 MARKS)

11. Describe asexual reproduction in Algae. (20 marks)
12. Discuss the division Dinoflagellata. (20 marks)
13. Discuss photosynthetic light absorbing pigments in *Anabaena*. (20 marks)
14. Discuss algal use in the food industry. (20 marks)