

BOWEN UNIVERSITY, IWO
COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE
PURE AND APPLIED BIOLOGY PROGRAMME
2022/2023 FIRST SEMESTER EXAMINATION
PAB 311: ALGAE

Instruction: Answer Question 1 and Two (2) Other Questions. Time Allowed: 2hrs: 30 Mins

1. (a) Classify algae divisions based on classes of chlorophyll pigments (15 marks)
(b) Highlight ten (10) general characteristics of members of the division Phaeophyta (15 marks)
2. (a) Discuss on the agricultural and commercial uses of algae (10 marks)
(b) i. List five processes that make nutrients available to algae (5 marks)
ii. List five adaptations of algae for surviving in the intertidal environment (5 marks)
3. Describe in detail, the various types of vegetative reproduction in Cyanobacteria (20 marks)
4. (a) Describe the life cycle of *Ectocarpus* (10 marks)
(b) Draw and label a chloroplast and state the function of any five components of it (10 marks)
5. Write extensively on the economic importance of Cyanobacteria (20 marks)