

UNIVERSITY

### UNIVERSITY EXAMINATIONS

# THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY

## **ZOOL 312: MARINE BIOLOGY**

STREAMS: BSC (BIOLOGY) Y3S2

**TIME: 2 HOURS** 

DAY/DATE: TUESDAY 09/04/2019

2.30 P.M. – 4.30 P.M.

### **INSTRUCTIONS:**

- Answer ALL questions in section A and any TWO from section B
- Illustrate your answers with diagrams where appropriate

### **SECTION A (30 MARKS)**

- Q1. Distinguish between the following concepts citing an example for each. (6 marks)(a) Marine biology and marine ecology.
  - (b) Saline and marine.
  - (c) Neaptide and spring tide

#### Q2. Write explanatory notes on the following organisms. (6 marks) (a) Marine planktonic organisms

- (b) Marine mammals
- (c) Sea weeds

### Q3. State the characteristic features of the following marine habitats. (6 marks) (a) Sand shores

- (b) Mangrove wetlands
- (c) Coral reefs

#### ZOOL 312

- Q4. Give the importance of studying marine biology as a discipline. (4 marks)
- Q5. With aid of a labelled diagram, describe the main physical feature of marine environment. (4 marks)
- Q6. (a) Explain the meaning and importance of fouling in marine organisms. (2 marks)
  - (b) Describe briefly the adaptations of organisms to rock shore habitants. (2 marks)

## **SECTION B (40 MARKS)**

Q7. Discuss the adverse effects of human activities on marine ecosystem and suggest possible mitigating strategies. (20 marks)
Q8. Discuss citing examples the Mari culture of a named marine plant and marine animal. (20 marks)
Q9. Give an account of biotic and abiotic factors that influence the distribution of marine organisms. (20 marks)