



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
EDUCATION SCIENCE WITH IT**

4th YEAR 2nd SEMESTER 2018/2019 ACADEMIC YEAR

MAIN CAMPUS - REGULAR

COURSE CODE:	SZL 404	
COURSE TITLE:	MARINE BIOLOGY AND OCEANOGRAPHY	
EXAM VENUE:	BIO LAB	STREAM: (BED)
DATE:	25/04/2019	EXAM SESSION: 12.00-2.00PM
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**
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SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)

1. List three characteristics of an estuary environment. (3 marks)
2. Explain the importance of temperature and salinity in oceans. (3 marks)
3. Explain two sources of nutrients in the ocean and how they are available to phytoplanktons in the epipelagic life zone. (3 marks)
4. Using diagrams, describe formation of tides. (3 marks)
5. Explain your understanding of ocean trenches and how they are formed. (3 marks)
6. Briefly explain how oceans affect global climate and weather patterns. (5 marks)
7. Describe formation of three types of coral reefs. (3 marks).
8. Explain marine reproductive strategies. (3 marks)
9. List human impacts on marine environment. (3 marks)
10. Relate oceanic waves and formation of beaches on the coastal shores. (3 marks)

SECTION B: ESSAY QUESTIONS (40 MARKS)

11. The processes that mold ocean basins occur slowly, over tens and hundreds of millions of years. Based on this statement describe the origin of oceans and factors that influence marine life. (20 marks)
12. Use a well labeled diagram, describe marine life zones and habitat biota. (20 marks)
13. Citing relevant examples, describe adaptation of marine flora and fauna. (20 marks)
14. Discuss climate change and how it affects marine organisms (20 marks)