



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE AWARD OF THE DEGREE
OF BACHELOR OF SCIENCE IN APPLIED AQUATIC SCIENCE CONSERVATION
WITH IT
FIRST SEMESTER 2022/2023
(SEPTEMBER - DECEMBER, 2022)

AQUA 310: OCEANOGRAPHY

STREAM: Y3 S1

TIME: 2 HOURS

DAY: FRIDAY, 9:00 A.M -11:00 A.M

DATE: 09/12/2022

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Answer ALL Questions in Section A (Compulsory) and any other TWO Questions in section B.***

SECTION A

1. Discuss, with the aid of a diagram, the sources and distribution of oxygen and carbon dioxide in the ocean column (6 marks)
2. Explain the continental drift theory (4 marks)
3. With the aid of a diagram, explain the oxygen and carbon dioxide distribution in the ocean column (6 marks)
4. Using illustration, explain the various ocean features (6 marks)
5. Discuss greenhouse effects and its impact on global climate issues (8 marks)
6. Provide the meaning of the following terms as used in oceanography
 - a) carbon sequestration
 - b) photosynthesis
 - c) ozone layer

d) thermocline

e) green house gasses (5 marks)

7. Briefly describe the intertidal zone in oceans, mentioning its characteristics and challenges (5 marks)

SECTION B

8. Discuss carbon cycle in oceans (15 marks)

9. Write an essay on ocean waves; on their formation, factors that control their size and the different types (15 marks)

10. Discuss the energy transfer in ocean systems (15 marks)