

TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering and Technology Department of Mechanical & Automotive Engineering UNIVERSITY EXAMINATION FOR:

Diploma Marine Engineering

EMR 2108: MARINE ENVIRONMENT PROTECTION 1

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2016 TIME: 2 HOURS

DATE: Pick Date Dec 2016

Instruction to Candidates:

You should have the following for this examination

- Answer booklet
- Non-Programmable scientific calculator

This paper consists of **FIVE** questions. Attempt **ANY THREE** questions.

Maximum marks for each part of a question are as shown.

Do not write on the question paper.

Question ONE

a) What are the causes of Coral diseases?

4 marks

b) Explain any 4 Coral diseases.

16 marks

Question TWO

- a) Describe the following types of fish found in an Estuary.
 - i) Freshwater fishes
 - ii) True estuarine fishes
 - iii) Diadromous fishes

8 marks

b) Explain the factors that affect fish distribution in an Estuary.

12 marks

Question THREE

- a) Explain the following marine ecosystems:
 - i) Coastal waters
 - ii) Lagoons
 - iii) Open Oceans
 - iv) Soft- bottom continental shelves

8 marks

b) Explain 6 problems caused by Marine Litter.

12 marks

Question FOUR

- a) Define the following terms as used in UNCLOS:
 - i) Area
 - ii) Authority
 - iii) Activities in the Area
 - iv) Dumping
 - v) State parties

10 marks

- b) Define the following terms as used in LDC (London Dumping Conventio);
 - i)Sea
 - ii)Special Permit
 - iii)General Permit
 - iv) Wastes or other matter

10 marks

Question FIVE

- a) Define the following;
 - i) Reefs
 - ii) Corals 4 marks
- b) State the roles of Marine Protected Areas in protecting marine habitats and biodiversity

 15 marks