

SOUTH EASTERN KENYA UNIVERSITY

UNIVERSITY EXAMINATIONS 2014/2015

THIRD YEAR FIRST SEMESTER EXAMINATIONS FOR B.SC FISHERIES MANAGEMENT AND AQUACULTURE TECHNOLOGY

WFA 307: Ecology of estuarine ecosystems

DATE: 21st APRIL 2015 TIME: 2 HOURS

Instructions: Answer ALL question in Section A and ONLY TWO questions in Section B

SECTION A

1. What do you understand by the term 'mangrove'? List 4 other words or phrases that are used synonymously with 'mangrove' (3 marks) 2. Identify 3 environmental factors that influence the distribution of sea grass (3 marks) 3. State 4 advantages of tides in the mangrove community (4 marks) 4. State 2 precautions that you would take when sampling organisms which inhabit the sea grass beds (2 marks) 5. Describe 5 important roles of mangrove forests (5 marks) 6. Explain what <u>Pneumatophores</u> are. Describe 4 types of pneumatophores (5 marks) 7. Describe the zonation of sea grasses (5 marks) 8. Distinguish between <u>True mangroves</u> and <u>non-True mangroves</u> (4 marks)

SECTION B

9.

a) Discuss the connectivity between mangrove ecosystems, the coral reef ecosystem and the sea grass beds (8 marks)	
b) Describe the importance of seagrass in the marine ecosystem	(8 marks)
c) Discuss the adaptations of sea grass to their environment	(4 marks)
10.	
a) Describe 4 unique characteristics of mangrove habitats	(4 marks)
b) Discuss in detail how mangroves are adapted for life in their habitat	(12 marks)
c) Discuss the current threats facing the mangroves and their habitats	(4 marks)
11.	
a) Describe the zonation of mangrove species along the Kenyan coast	(14 marks)
b) Discuss 3 factors that influence the zonation described in (a) above	(6 marks)