



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY
SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN BIOLOGICAL SCIENCES
FOURTH YEAR FIRST SEMESTER 2018/2019 ACADEMIC YEAR
MAIN CAMPUS - REGULAR

COURSE CODE:	SBI 3437
TITLE:	FISH AND FISHERIES BIOLOGY
EXAM VENUE:	STREAM: (BIO)
DATE:	EXAM SESSION:
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. State three characteristics of the super class gnathostomata, subclass Elasmobranchii. (3 marks)
2. Explain three factors that influence habitat preference by Cichlid species. (3 marks)
3. State six factors that contributed to the decline of the fish fauna in the Lake Victoria. (3 marks)
4. Describe three methods for production of mono-sex fish in culture systems. (3 marks)
5. Name any three fishing gears and where they are used within Lake Sare. (3 marks)
6. Explain the Fulton's condition factor (K) and its relevance in fish Biology. (3 marks)
7. Briefly describe the thermoregulatory process and migratory behavior of a named fish species. (3 marks)
8. Explain why it is easier to produce freshwater rather than marine fin fishes. (3 marks)
9. Explain the co-existence of the piscivorous Nile perch and *Haplochromine* sp. in Lake Sare (3 marks)
10. Explain the concept of maximum sustainable yield (MSY) in fisheries management. (3 marks)

SECTION B: ESSAY QUESTIONS (40 MARKS)

11. Describe adaptive radiation in fishes. (20 marks)
12. Discuss the socio-economic impact of mariculture fisheries in Kenya. (20 marks)
13. Discuss the reproductive strategies of various fish groups. (20 marks)
14. Discuss the socio-economic impact of the introduction of Nile perch in Lake Victoria. (20 marks)