<table>
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<th>COURSE CODE:</th>
<th>SBI 3437</th>
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<tbody>
<tr>
<td>TITLE:</td>
<td>FISH AND FISHERIES BIOLOGY</td>
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<tr>
<td>EXAM VENUE:</td>
<td>STREAM: (BIO)</td>
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<td>DATE:</td>
<td>EXAM SESSION:</td>
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<td>TIME: 2 HOURS</td>
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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
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)