



KISII UNIVERSITY

UNIVERSITY EXAMINATIONS

**THIRD YEAR EXAMINATION FOR THE AWARD OF THE DEGREE
OF BACHELOR OF SCIENCE IN APPLIED AQUATIC SCIENCES,**

**CONSERVATION WITH IT
FIRST SEMESTER 2022/2023
(SEPTEMBER - DECEMBER, 2022)**

AQUA 350: AQUACULTURE

STREAM: Y3 S1

TIME: 2 HOURS

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

DATE: 18/12/2022

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 (40 MARKS)

- Differentiate between the following as used in aquaculture. (6 marks)
 - Mariculture and brackish culture
 - Monoculture and polyculture
 - Culture and capture fisheries
- Briefly explain any four aims of aquaculture. (4 marks)
- Giving appropriate examples, explain any four factors to consider when selecting a species for aquaculture. (8 marks)
- Describe raceway fish culture. (4 marks)
- Describe the principles of Recirculating Aquaculture Systems (RAS) (5 marks)

6. Pond preparation is important before fish stocking. Discuss this assertion. (6 marks)
7. Briefly explain why it is important to lime and fertilize earthen fish ponds. (3 marks)
8. How is fish sampling done in aquaculture. (4 marks)

SECTION B

9. Describe the steps followed during pond construction.
 - a) Outline four common causes of stress in fish (2 marks)
 - b) Discuss the symptoms of fish diseases (7 marks)
 - c) Briefly explain how diseases can be prevented in aquaculture. (6 marks)
10. Discuss the major challenges facing aquaculture development in Kenya. (15 marks)