



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

**THIRD YEAR SECOND SEMESTER UNIVERSITY EXAMINATION FOR THE
DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE**

2016/2017 ACADEMIC YEAR

REGULAR

COURSE CODE: AAS 3328

COURSE TITLE: Fish farming and production

EXAM VENUE:

STREAM: BSc. (Animal Science)

DATE:

EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in section A and ANY other 2 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: 30 MARKS (ANSWER ALL QUESTIONS)

1. a) State the taxonomic classification of the tilapia fish from the class level (5 marks)
b) Using common and scientific names, name two culture fish species in Kenya (2 marks)
c) Explain the adaptation features of fish in fresh and marine water environments for osmoregulation (6 marks)
2. Differentiate between the following giving examples for each
a. Culture and capture fisheries (2 marks)
b. Coastal versus off shore marine fisheries (2 marks)
c. Anadromous versus diadromous fishes (2 marks)
d. Monosex versus polysex (2 marks)
3. Expound on the methods used to attain all male tilapia fingerlings (6 marks)
4. Highlight on the safety precaution to bear in mind while handling and moving fish (5 marks)

SECTION B: 40 MARKS (Answer ANY TWO questions from this Section)

5. Cage farming is a relatively new technology being practised along the shores of Lake Victoria, Kenya. Describe the characteristics and requirements of this form of fish farming while highlighting the advantages and disadvantages when compared to traditional method of natural capture from the lake as is the tradition in this region (20 marks)
6. Opiyo is a young unemployed youth residing in Isiolo County, Kenya. Being from the lake region, he wants to start up a pond fish farming enterprise as a form of employment to generate income. As an animal science student with knowledge on fish farming and production, advise him on the viability of the venture in terms of requirements, challenges he is likely to encounter and possible solutions to cited predicaments (20 marks)
7. Adonai Self Help Women group in Muranga County was formed with the objective of meeting food security needs of its members who are widowed and elderly. However, over the span of two years the group has been operational, their tilapia production has greatly been hampered by water quality and predators issues. Discuss these issues in terms of the required standards that need to be maintained and measures they can put in place to ensure the fish remain healthy, grow well, and give a good crop in a reasonable amount of time (20 marks)

