

AAF 220



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

**(MMUST)
MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

**SECOND YEAR MAIN EXAMINATION FOR
THE DEGREE OF B.Sc. IN:
FISHERIES AND AQUACULTURE**

COURSE CODE: AAF 220

COURSE TITLE: FISH SYSTEMATICS AND TAXONOMY

DATE: 12.04.2023

TIME: 3 – 5 PM

INSTRUCTIONS:

Answer ALL Questions in SECTION A and ANY TWO questions in SECTION B.

Correct and well-illustrated answers will earn you full marks.

MMUST OBSERVES ZERO TOLERANCE TO EXAMINATION CHEATING

SECTION A (30 MARKS)

1. Outline the morphological and anatomical characteristics of fishes (3marks)
2. Differentiate between taxonomy and systematics (3marks)
3. Describe any three types of scales found in Actinopterygian fishes (3marks)
4. State the advantages of scientific names over common/ vernacular names (3marks)
5. Describe situations where the scientific names of a fish can change (3marks)
6. Explain the following fin formula: i)DXIV8 (1mark) ii) AIII7 (1mark) iii) AIV8 (1mark)
7. Explain the importance of binomial nomenclature system (3marks)
8. Describe two methods of preservation of fish for taxonomic work (3marks)
9. Describe the various “type” collections and their importance in taxonomic studies (3marks)
10. Outline the references of labelling fish specimens (3marks)

SECTION B (40 MARKS)

11. Discuss the philosophies of classification in fish systematics (20marks)
12. Noted that “different parts of the world support greatly different assemblages of species.” Discuss this statement by Wallace (1979) in reference to zoogeographical realms (20 marks)
13. Describe methods of collection of fish specimen for taxonomic work and state their disadvantages (20 marks)