



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI - ABUJA
FACULTY OF SCIENCE
Department of Biological Sciences
2023_1 POP EXAMINATION

BIO 410 - FISHERIES & AQUACULTURE.

CREDIT UNIT: 3

TIME ALLOWED: 2½ HOURS

INSTRUCTION: ANSWER FOUR QUESTIONS ONLY. QUESTION 1 IS COMPULSORY.

- 1a List 4 environmental factors that affect fecundity (2 marks)
 - 1b. Describe the Cardiovascular system of a fish (9 marks)
 - 1c. Explain the Purposes for Hatchery in aquaculture (6 marks)
 - 1d. Identify the proper steps in fresh fish handling (4 marks)
 - 1e State four demerits of the Numerical Method of Fish food analysis (4 marks)
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2. Discuss Salting and Pickling as methods of fish preservation (15 marks)
 3. Discuss the use of Hypophysation in fish breeding and propagation (15 marks)
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4. Write short notes on the following basic organs/systems in fish
 - a. Corpuscles of Stannius (3 marks)
 - b. Ultimobranchial Gland (3 marks)
 - c. Pineal Gland (4 marks)
 - d. Lateral line systems (5 marks)
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5. Write briefly on the following techniques of fish culture
 - (a) Extensive Fish Culture (5 marks)
 - (b) Semi- Intensive Fish Culture (5 marks)
 - (c) Intensive Fish Culture (5 marks)
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- 6a. Categorize the different types of fish pond (5 marks)
 - 6b. Discuss the following steps of fish pond construction
 - i. Time of construction (4 marks)
 - ii. Preparation of Site (3 marks)
 - iii. Marking the outlines (3 marks)