



NATIONAL OPEN UNIVERSITY OF NIGERIA
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Science
JULY 2017 EXAMINATION

COURSE CODE: BIO 410

COURSE TITLE: FISHERIES AND AQUACULTURE

TIME ALLOWED: 2HOURS

INSTRUCTION: QUESTION ONE IS COMULSORY AND ANY OTHER THREE QUESTIONS.

1.
 - a. Outline the steps or procedures for pond management **(8marks)**
 - b. State **four** factors determining the shape of a fish pond **(4marks)**
 - c. State **three** factors that determine the size of a fish pond **(3marks)**
 - d. Distinguish between a bony and cartilaginous fish (4marks).**
 - e. Write short notes on the following basic organs and systems in fish:
 - i. Integument **(2marks)**
 - ii. Respiratory apparatus **(2marks)**
 - iii. Lateral line system **(2marks)**
2.
 - a. What do you understand by feed formulation? **(4marks)**
 - b. Explain the steps in feed formulation **(4marks)**
 - c. With an example, explain the term “best-by-technique” in diet formulation **(7marks)**
3.
 - a. Outline **six** major objectives of food studies in fisheries **(6marks)**
 - b. Mention **six** different methods of analyzing food of fishes? **(3marks)**
 - c. Explain any **two** of these methods of analyzing food of fishes **(6marks)**
4.
 - a. What you understand by fish culture **(4marks)**
 - b. Give **five** reasons why we practice aquaculture **(5marks)**

- c. Based on the level of manipulation of the environment, explain **three** classifications of techniques involved in fish culture **(6marks)**
5. a. State **six** significance of age and growth studies in fishes **(3marks)**
b. Outline **eight** steps involved in age and growth studies of fishes **(4marks)**
c. There are important forms or parameters in which the growth of fish is estimated. Explain these parameters/form **(3marks)**
d. Mention **five** methods of studying growth of a fish **(5marks)**