BOWEN UNIVERSITY
(of the Nigerian Baptist Convention)

COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE
AGRICULTURE PROGRAMME

COURSE CODE:	**ANF 220**	**COURSE TITLE:**	**Aquaculture and Introduction to wildlife**
COURSE UNIT:	2	**TIME:**	2 HOURS
SESSION :	2022/2023	**SEMESTER:**	SECOND SEMESTER

INSTRUCTION: Answer any four (4) questions, each question carries equal marks

SECTION A

1. a. Define aquaculture with specific examples (10 marks)

   b. List and explain at least seven (7) objectives of aquaculture (15marks)

2. a. Discuss the aquaculture production system and states its merits and demrits (12marks)

   b. Enumerate the aquaculture culture techniques based on number of species. (13marks)

3. List and explain the aquaculture culture techniques based on rearing facilities. (25marks)

SECTION B

4. A woman attended a seminar and was informed about how African catfish production is thriving in Nigeria. In the seminar, the pond design for catfish production was only limited to earthen pond. 3 months after the seminar, the woman decided to apply what she learned at the seminar on an old 2-plot land (which is now bushy).

a. Enumerate the steps she would take in constructing the pond. (5 marks)

b. She discovered that the land was good for her pond construction.

i. List the soil tests she carried out. (2 marks)

ii. What signs did she observe from each test that made her conclude that the land was good? (8 marks)

c. Discuss briefly on 5 accessories of the pond she later constructed. (10 marks)

5a. With the aid of a diagram, explain the food supply in ponds. **(13 marks)**

b. Write short notes on Oligotrophic, Eutrophic and Dystrophic ponds. **(6 marks)**

c. Discuss briefly on:

i. Biological oxygen demand of an aquatic body to increase. **(3 marks)**

ii. Causes of algal bloom and its effect on aquatic life. **(3 marks)**

6. a. Enumerate the goals and demerits of introducing exotic fish species in local/inland water bodies. **(10 marks)**

b. A group of fish was fed for 5 weeks. The total amount of feed offered on a dry weight basis is 150g per fish. The increased average weight was from 150g to 250g. Determine the :

i. FCR and FCE (6marks)

ii. Comment on the value of FCR and FCE above in respect to feed utilization and body weight gain (4marks)

c. State the water quality requirements of *Clarias gariepinus* of the parameters stated below.

i. pH ii. Ammonia iii. Temperature iv. Dissolved Oxygen **(5 marks)**