



**National Open University Of Nigeria**  
**Plot 91, Cadastral Zone, NnamdiAzikiwe Expressway, Jabi - Abuja**

**Faculty of Science**

**BIO 314 - Animal Behaviour (2 Credit Units)**

**Time 2hours**

**Question 1 is compulsory. Answer FOUR questions only**

1a.i. Define the term 'Biological clocks'? (2marks)

1a.ii. Enumerate the types of Biological Clocks (3marks)

1b. i Define the term 'Taxis' (1mark)

1b. ii. Complete the following table (4marks)

<b>S/ No</b>	<b>Taxes</b>	<b>Stimulus</b>
1		light
2	chemotaxis	
3	hydrotaxis	
4		fluid flow
5		temperature changes
6	aerotaxis	
7	anemotaxis	
8	barotaxis	

1c. .Describe the nervous system of arthropods (9 marks)

1d. State Tinbergen's four questions for ethology.(6 marks)

2a.i Define Sleep. (1 mark)

2a.ii. List the two types of sleep (2marks)

2b.Enumerate 6 components of good sleep hygiene.(6marks)

2c. Explain the term 'Sleepwalking' (6 marks)

3a. Describe conflict behaviour in animals (4marks)

3b. Write short notes on the following forms of conflict behaviour

- i.**      *Approach–approach* (4marks)
- ii.**     *Avoidance–avoidance*(4marks)
- iii.**    *Approach–avoidance*:(3marks)

- 4a. i. Define the term ‘Navigation’.(1½mark)
- ii. List 3 external factors that determine the initiation of migration (1½marks )
  - b. Explain the use of the geomagnetic compass by migrating birds (3marks)
  - c. Explain the navigational methods in Animals (9 marks )

5. Describe the following habitats .

- a.Grassland (5marks)
- b.Desert (5marks)
- c.Wetland(5marks)