



National Open University Of Nigeria
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Science
JANUARY/FEBRUARY, 2018 EXAMINATION

COURSE CODE: BIO 304 (2 CREDIT UNITS) TIME ALLOWED: 2HOURS

COURSE TITLE: GENERAL ECOLOGY

INSTRUCTION: Answer question ONE (1) and any other THREE (3) Questions only

- 1a What is the significance of primary productivity? **(3marks)**
- 1b Outline and discuss the major biotic components of an ecosystem **(9 Marks)**
- 1c Identify the functional components of a named ecosystem, and describe how they interact to form environmental system. **(9 Marks)**
- 1d In a single sentence describe how living organisms use energy **(4 Marks)**

- 2a Identify the principal steps in the operation of an ecosystem **(5marks)**
- 2b List and describe any three ways for the presentation of demographic data **(10 Marks)**
- 3a Outline any three human activities that can improve the quality of the ecosystem from conservation point of view **(3 Marks)**

- 3b Briefly, explain each of the following
 - i Habitats **(2 Marks)**
 - ii Niches **(2 Marks)**
 - iii Food chain **(2 Marks)**
 - iv Web **(2 Marks)**
 - v Trophic levels **(2 Marks)**
 - vi Pyramid of numbers **(2 Marks)**

- 4a What is primary productivity **(4 Marks)**
- 4b List and explain the different life processes taking place within the eco-system **(6 Marks)**
- 4c Briefly describe how the unidirectional energy flow in eco-system takes place **(5 Marks)**
- 5a Enumerate the significance of primary productivity in an ecosystem **(4 Marks)**
- 5b List any two positive and negative Interactions between biotic communities **(6 Marks)**

5c List the major steps required to address environmental problems of concern **(5 Marks)**