

## NATIONAL OPEN UNIVERSITY OF NIGERIA

## Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja Faculty of Science Department of Pure and Applied Science End of Second Semester Examination 2019 Academic Session 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<br>1b  | What are the fundamental steps in the operation of the ecosystem<br>Briefly, but concisely discuss the causes of Industrial pollution? | (5marks)<br>(20marks) |
|---|--|-----------------------|
| 2a  | Write short notes on each of the following:  |                       |
| i.  | Primary Succession   | (4marks)              |
| ii.   | Secondary Succession   | (4marks)              |
| iii   | Climax vegetation  | (4marks)              |
| 2b Outline any three safety measures for the maintenance of nuclear power plants (3marks) |  |                       |
|   |  |                       |
| 3a  | Explain the meaning of primary productivity in ecology   | (9 marks)             |
| 3b  | Describe efficiency of energy transfer?  | (6 marks)             |
| 4a.   | List and explain any three different life processes that take place within the eco-<br>System (6marks)                                 |                       |
| b.  | Outline any five human activities that can improve the quality of the ecosystem from   |                       |
|   | conservation point of view   | (5marks)              |
| c.  | Enumerate any four significance of primary productivity in an eco  | osystem (4marks)      |
|   |  |                       |
| 5a.   | escribe the two mechanisms by which nitrogen is returned from the oceans   |                       |
|   | to the land  | (12marks)             |
| b.  | List any three negative Interactions between biotic communities  | (3marks)              |