



**ELIZADE UNIVERSITY,
ILARA-MOKIN,
ONDO STATE**

FACULTY: BASIC & APPLIED SCIENCES
DEPARTMENT: BIOLOGICAL SCIENCES
SECOND SEMESTER EXAMINATION
2017/2018 ACADEMIC SESSION

COURSE CODE: BIO 202

COURSE TITLE: ECOLOGY 1

DURATION: 2 HOURS

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HOD's SIGNATURE

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS IN ALL

- 1a. Define Ecosystem.
- 1b. What are fundamental characteristics of an ecosystem?
- 1c. What are the factors controlling ecosystem?
- 1d. Explain briefly the major components of the Ecosystem.

- 2a. Explain the following:
 - (i) Autotroph (ii) Heterotroph (iii) Consumers (iv) saprotrophs
 - (v) Gross primary production.
- 2b. What is the primary energy source of life on earth and what is the main means by which autotrophic organisms obtain energy?
- 2c. Draw a labelled diagram of the Phosphorus cycle to show the processes involved.

- 3a. What are the differences between the concepts of *food* chain and food web?
- 3b. Describe the movement of energy and nutrients in an ecosystem.
- 3c. State why energy transformations are never 100% efficient.
- 3d. (i) What are trophic levels?
(ii). Explain briefly the three main types of trophic pyramids studied in ecology?

- 4a. Discuss the human impacts on (i) Nitrogen cycle and (ii) Phosphorus cycle
- 4b. What is Eutrophication?
- 4c. What are the stages involved in the process in 4b above?
- 4d. What are the impacts of the process in 4b above?

- 5a. Explain the tenet in which special creation and science are in mutually exclusive realm of thought.
- 5b. Briefly explain modern evidence of evolution.
- 5c. List and explain the factors causing microevolution in a population of organisms.

- 6a. What is the Geological Time Scale and how is it important to Scientists?
- 6b. State the different Eras (division) of Geological Time Scale with their years.
- 6c. How does Geologists determine the age of rocks and list the Principles that are associated with the Relative Dating?