



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja  
Faculty of Science

**DEPARTMENT OF BIOLOGICAL SCIENCES**

**2024 1 EXAMINATION**

**COURSE CODE: BIO 307**

**COURSE TITLE: EVOLUTION**

**CREDIT: 2 Units**

**TIME ALLOWED: 2 Hours**

**Instructions:** Attempt question number One (1) and any other TWO (2) questions. Question number one (1) carries (30) marks, while the other questions carry (20) marks each.

1. (a) i. Write briefly on Plant Evolution (10mks)  
ii. Explain the process of Adaptation (5mks)  
(b) What is the origin of Life? (5mks)  
(c) Write on the contribution of Theodosius Dobzhansky in population genetics (10mks)
2. (a) Write succinctly on the contribution of Thomas Malthus in the development of evolution (8mks)  
(b) Write short notes on Horizontal Gene Transfer (12mks)
3. (a) Write on the following processes of mutation.
  - i. Insertions (6mks)
  - ii. Deletion (6mks)(b) Outline examples of Duplication (8mks)
4. (a) Describe the male reproductive system (14mks)  
(b) Write on reproductive isolation of pre-mating mechanism under Habitat isolation (6mks)
5. (a) Write exhaustively on Classification (12mks)  
(b) Briefly describe the Miller and Ureys experiment to supports the hypothesis that small organic molecules were formed. (8mks)