



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI - ABUJA**  
**FACULTY OF SCIENCE**  
**Department of Biological Sciences**  
**2022\_2 EXAMINATION**

**COURSE CODE: BIO404**

**COURSE TITLE: SYSTEMATICS BIOLOGY**

**CREDIT: 3 UNITS**

**TIME ALLOWED: 2½ HOURS**

**INSTRUCTION: ANSWER NUMBER ONE (1) AND ANY OTHER THREE (3) QUESTIONS**

- 1a. Explain the term Biosystematics. (3 marks)
- b. What do you understand by the term nomenclature. (2 marks)
- c. Account for the Problems and challenges of Biosystematics. (10 marks)
- d. Discuss classification according to the following Taxonomists:
  - i. Albert Magnus (5 marks)
  - ii. Pedanius Dioscorides. (5 marks)
  
- 2a. List the four parts of plants that may be investigated anatomically as sources of taxonomic evidence (4marks)
- 2b. Account for the test of characters in taxonomy. (5 marks)
- 2c. Explain what do you understand by characters in systematic biology (6 marks)
  
- 3a. Discuss the population taxonomy (6 marks)
- 3b. Write notes on plant chemotaxonomy (9 marks)
  
- 4a. What are the unique obstacles faced by the researchers in analysing apomixes? (7 marks)
- 4b. Write notes on Andrea Caesalpino as one of the pioneer taxonomists (8 marks)
  
- 5a. Discuss parallelism and convergence in taxonomy (5 marks)
- 5b. Discuss the different parts of a flower (10 marks)
  
- 6a. List the four parts of plants that may be investigated anatomically as part of sources of taxonomic evidence (4 marks)
- 6b. Write a short note on Polar axis (3 marks)
- 6c. Give a detailed description of population taxonomy (8marks)