



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**PLOT 91, CADASTRAL ZONE, NNAMDIAZIKIWE EXPRESSWAY, JABI - ABUJA**  
**FACULTY OF SCIENCE**  
**SEPTEMBER 2020\_1 EXAMINATION**

**COURSE CODE: BIO 404**

**COURSE TITLE: SYSTEMATIC BIOLOGY**

**COURSE CREDIT: 2 UNITS**

**TIME ALLOWED: 2 HOURS**

**INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER THREE QUESTIONS**

- 1a. What is phylogenetic relationship? (2marks)
  - b. What is classical taxonomy? (2marks)
  - c. What do you understand by citation? (6marks)
  - d. Account for parallelism and convergence in taxonomy (5marks)
  - e. Discuss the experimental phase of plant taxonomic development (2 marks)
  - f. Explain the concept of 'polarity in plants' (4marks)
  - g. Discuss on Ecological Evidence as a Source of Taxonomic Evidence. (4 marks)
2. Discuss fully specific epithet (15marks)
3. Discuss the principles that form the basis of system of nomenclature (15marks)
- 4a. What is paleobotany? (5marks)
  - 4b. Discuss the roles of paleobotany in plant taxonomy (10marks)
- 5a. Explain what you know about the herbalist period of taxonomic history (5 Marks)
- 5b. Discuss classification according to Albert Magnus (5 Marks)
- 5b. Discuss the system of assigning names to plants in cultivation (5 marks)