



National Open University of Nigeria
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Sciences
Department of Pure and Applied Sciences
October/November, 2019 Examination
Course code: BIO 404
Course title: Systematic Biology Units: 2
Time allowed: 2 Hours

INSTRUCTION: Answer question ONE (1) and any other THREE (3) questions

Question 1

- 1ai. Where is the first Herbarium in the world? (1mark)
ii. Where are the two largest herbaria in the world? (2marks)
1b. As a curator in a Herbarium, outline the general instructions you would give to Herbarium users (8marks)
1c. Write note on apomixes (9marks)
1d. State any five (5) criteria used to derive of specific epithet (5marks)

Question 2

- 2a. Briefly discuss Ecological study as a Source of Taxonomic Evidence. (5marks)
2b. State the six principles that form the basis of system of nomenclature (6marks)
2c. Discuss the contributions of Carolus Linnaeus towards the development of systematic biology (4marks)

Question 3

- 3a. Discuss the role(s) of paleobotany in plant taxonomy (7marks)
3b. Explain what do you understand by plant chemotaxonomy? (6marks)
3c. What is geographical isolation? (2marks)

Question 4

- 4a. Discuss genotypic variation in plants (10marks)
4b. What is Natural Selection? (5marks)

Question 5

- 5a. What suggestions should Botanists forming generic names or specific epithets comply with? (6marks)
5b. Write a short note on catastrophic selection? (5marks)
5c. Explain typification in systematic biology (4marks)