

THE OPEN UNIVERSITY OF SRI LANKA
 FACULTY OF NATURAL SCIENCES
 B.Sc./ B. Ed. DEGREE PROGRAMME - LEVEL 04
 BOU 2102 / BOE 4102 –SYSTEMATICS OF HIGHER PLANTS AND ANIMALS
 FINAL EXAMINATION - 2015/2016



DURATION – TWO (02) HOURS

Date: 1st July 2016

Time : 9.30 – 11.30 am

Answer any four (04) questions.

If you are answering the question from Part B, Answer should be written in a separate Answer Book.

PART A

01. Write an essay on importance of studying systematics of organisms and specific objectives of systematics in a biological sense.
02.
 - i) Explain how does the Botanical gardens serve as research centers, centers of educations and centers for conservation of certain plants.
 - ii) State the difference between a botanic garden and a herbarium. Briefly discuss the main functions of a herbarium.
03. Write short notes on any three (03) of the following.
 - i) Contribution of Linnaeus to plant systematics.
 - ii) Taxonomic literature in identification of plants.
 - iii) Flora of Sri Lanka during Dutch occupation
 - iv) Natural classification systems of plants
04. Biomolecules in plants have long been used as a source of taxonomic evidence.
 - a) State the major types of biomolecules that could be studied and used as taxonomic evidences
 - b) Briefly describe the principles of commonly used methods available to study the biomolecules mentioned in the above.
05. Write an account on practices that should be followed to become a “good systematist”

PART B

06. a) Define what is nomenclature
- b) Citing examples, state four (4) advantages and four (4) disadvantages of using scientific names over common names for animals.
- c) Describe the basic principles of International Zoological nomenclature (ICZN)