

THE OPEN UNIVERSITY OF SRI LANKA
B.Sc./ B. Ed. DEGREE PROGRAMME - LEVEL 04
BOU 2102 / BOE 4102 –SYSTEMATICS OF HIGHER PLANTS AND
ANIMALS
FINAL EXAMINATION - 2013/2014



DURATION – TWO (02) HOURS

Date: 30th June 2014

Time : 1.00 - 3.00 pm

Answer any four (04) questions.

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

PART A

01. Write an essay on herbaria and their importance in plant systematics.
02.
 - i) Distinguish between the Taxonomy and Systematics.
 - ii) State the specific objectives of the systematics of higher plants.
 - iii) Briefly describe the status of plant systematics during preliterature period
03. Write short notes on any three (03) of the following.
 - i) Systematics after introduction of Darwin's theory of Evolution.
 - ii) Principles of International Code of Botanical Nomenclature (ICBN).
 - iii) General features and important steps of a dichotomous key.
 - iv) Advantages and disadvantages of using Polyacrylamide Gel electrophoresis (PAGE) in plant systematics
04.
 - i) Among other molecular evidences used in plant systematics, DNA also plays an important role. State the major properties of DNA that have made it a useful taxonomic tool.
 - ii) Briefly explain the major sources of DNA in plants which can be used as a marker in plant systematics.
 - iii) State the advantages of using data derived from DNA over other molecular evidences.
05. Discuss the areas in which ethics should be incorporated in research in taxonomy.

PART B

06. Briefly explain on the development of methods of animal classification systems.