



**THE OPEN UNIVERSITY OF SRI LANKA**

**B.Sc/B.Ed DEGREE PROGRAMME – BOTANY - LEVEL 04**

**FINAL EXAMINATION – 2008/2009**

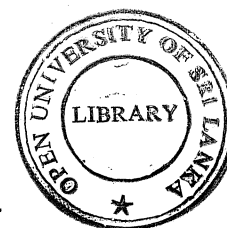
**BTU 2103/BTE 4103 – SYSTEMATICS OF PLANTS AND ANIMALS**

**DURATION : TWO AND A HALF (2 ½) HOURS.**

**DATE : 12<sup>th</sup> January 2009**

**TIME: 09.30 a.m. – 12.00 noon**

**ANSWER ANY FOUR (04) QUESTIONS.**



01. (a) Describe briefly the role of a systematist in the field of science.  
(b) Outline the ways of becoming a 'good systematist' respect by all.
02. Write short notes on the following.  
(a) Concepts of species  
(b) Principles of the International Code of Botanical Nomenclature.
03. (a) What is meant by the phenotypic variability in plant populations?  
(b) Explain the importance of phenotypic variability to a plant systmatist.  
(c) Describe the main factors that affect the phenotypic variability in plants.
04. Briefly explain the general steps that you should be followed in identification of an unknown specimen.
05. Explain how systematists use taxonomic data in discrimination grid for proper discrimination of plant or animal specimen.
06. Describe the taxonomic procedure required for description of a new species for publication.