

THE OPEN UNIVERSITY OF SRI LANKA
B.Sc. / B. Ed. DEGREE PROGRAMME - LEVEL 04
BTU 2103 / BTE 4103 – SYSTEMATICS OF PLANTS AND ANIMALS
FINAL EXAMINATION - 2006/2007



DURATION – TWO AND A HALF (02 1/2) HOURS

Date : 17th Nov. 2006

Time - 10.00 am - 12.30 pm

Answer Any Four (04) Questions.

01. (a) “In practice, identification in systematics involves classification and nomenclature too.” Comment on this statement.
- (b) Give a brief comparative account of the methods of plant identification.
- (c) Outline the general steps followed in the identification of an unknown plant.
02. Write short notes on the following.
- (a) Pre- Linnaean systems of plant classification
- (b) Guidelines for the legitimate naming of plant species
- (c) Main operations performed during systematic studies
03. Differentiate between the following.
- (a) Sympatry and allopatry in speciation
- (b) Synonyms and homonyms
- (c) Extrinsic and intrinsic variations within populations
- (d) Phenotypic variability in plants and animals
- (e) Use of square brackets in botanical and zoological nomenclature
04. Briefly describe the ethical responsibilities of a good taxonomist.
05. Explain how the Numerical Taxonomy is used in systematic studies.
06. (a) List the taxonomic characters which are used in identification and classification of organisms.
- (b) Describe how the physiological characters are used for the above purpose.