

THE OPEN UNIVERSITY OF SRI LANKA
B.Sc./ B.Ed. DEGREE PROGRAMME- 2012/2013
LEVEL 04 - BOU2102/ BOE 4102
SYSTEMATICS OF HIGHER PLANTS AND ANIMALS
OPEN BOOK TEST
DURATION - ONE (01) HOUR



Reg. No:.....

Date: 2nd February 2013

Time: 4.00 -5.00 pm

Answer all Questions in PART A. Answers should be written in the space provided.

PART A (30 Minutes)

(01) Underline the correct answer

- (A) Which branch of the Life Sciences is primarily concerned with the naming of species?
- Phylogeny
 - Synonymy
 - Taxonomy
 - Zoology
- (B) Who published "Genera Plantarum" in 1758?
- Aristotle
 - Geoffroy
 - Linnaeus
 - Ray
- (C). The most broad level of classification is
- Kingdom
 - Phylum
 - Class
 - Order
- (D). Which of the following is not a true statement?
- Dichotomous keys consist of a set of paired statements
 - You always begin with step one in a dichotomous key
 - Field dichotomous keys are more accurate in identification than that of technical keys
 - Dichotomous keys are a kind of single access keys.
- (E). Which pair of taxonomic terms or ranks are requirements for constructing a Linnaean name?
- Class and Phylum
 - Family and Subfamily
 - Genus and Species
 - Kingdom and Order

(02.) Match each of the following statements with the correct terms (Write down the corresponding letter in front of the statement).

- a. description b. classification c. systematics d. nomenclature
e. taxonomy f. identification

1.providing proper name of a plant
2.assigning features to a taxon
3.determining that an unknown object is identical to an already known object
4. study of plant classification
5.study of the diversity and history of organisms and their evolutionary relationships

(03.) Giving the time period or the year of introducing, name the persons who is credited for the following

- (a) Numerical Taxonomy
- (b) Arranging plants in a botanical garden according to a natural system
.....
- (c) Establishing Kew Gardens in London.
- (d) Herbarium concept
- (e) Biochemical characters employed in Systematics

(04) Give two reasons for each of the following.

a. Scientific names are always in Latin language.

- i.
- ii

b. Systematics depends on the other sciences for its existence

- i.
- ii

c. Preliterate humans could be considered as practical plant taxonomists

i.

ii.

d. Poisoning of plant materials before pressing is more effective than poisoning after pressing.

i.

ii.

e. Scientific name of an organism is more useful than its Vernacular name.

i.

ii.

(05) Differentiate between the following

a. Botanic Garden

Herbarium

.....

.....

.....

.....

.....

.....

b. Subjective synonyms

Objective synonyms

.....

.....

.....

.....

.....

.....

c. Natural classification systems

Artificial classification systems

.....

.....

.....

.....

.....

.....