

THE OPEN UNIVERSITY OF SRI LANKA
 B.Sc. / B. Ed. DEGREE PROGRAMME - LEVEL 04
 BOU 2102 / BOE 4103
 SYSTEMATICS OF HIGHER PLANTS AND ANIMALS
 OPEN BOOK TEST - 2010/2011
 DURATION - ONE (01) HOUR



35

Reg. No.

Date : 25th September 2010

Time: 4.00 - 5.00 pm

Answer All Questions.

Questions should be answered on the question paper itself.

PART A (30 minutes)

01. Give two (02) major reasons for each of the following.

a. Systematics depends on other sciences for its existence.

i.....

ii.....

b. Scientific names are always in Latin language.

i.....

ii.....

c. In a plant specimen, the presence of sexual parts in addition to vegetative parts is essential for its correct identification.

i.....

ii.....

d. When pressing plants, corrugated cardboard sheets are placed in between newspaper folders inside the plant press.

i.....

ii.....

e. Poisoning of plant specimens before pressing is more effective than poisoning after pressing.

i.....

ii.....

02. Who are credited for introducing the following?
- a. Taxonomic keys as an identification tool –
 - b. Numerical taxonomy –
 - c. Using binomials in plant nomenclature –
 - d. Modern genus concept –
 - e. Herbarium method –
 - f. Synonymy for plants –

03. a. Give **two (02)** important features of any natural classification system of plants?
- i.....
 - ii
- b. List **two (02)** main advantages of natural plant classification systems over mechanical systems.
- i.....
 - ii

04. a. Name the most comprehensive Flora available in Sri Lanka to be used in plant identification?
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- b. Give the name of the author and the year of publication of the Flora you mentioned.
-
- c. Give **three (03)** benefits of the revised Flora, to the taxonomists in Sri Lanka?
- i.....
 - ii.....
 - iii.....

d. Why is it necessary to revise any Flora continuously?

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05. Differentiate between the following.

ii. Monograph and revision

Monograph

Revision

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.....
.....

iv. Botanic garden and herbarium

Botanic garden

Herbarium

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BOU 2102 - PART B (30 minutes)

01. Describe the following in terms of animal systematics.

i. *Rana limnocharis* Weigman, 1873

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ii. *Etroplus Sureni*, 1975

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iii. Perera, E.M. Detection of *Balantidium spp* in monkey stools. Ceylon Med. J. 12: 7. 1968.

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02. a. What is meant by Biological Classification?

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b. Give reasons in your own words why classification is necessary for living organisms.

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.....
.....

c. Name the **two (02)** basic principles of classification you have studied?

i.....

ii.....

d. Describe briefly **one (01)** of the principles you mentioned in (c).

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e. What is the basis of Upward Classification used by many taxonomists?

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f. What are the factors that led taxonomists to develop current methods of classification?

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g. Write **three (03)** differences between homologous and analogous characters.

Homologous

Analogous

i.....

ii.....

iii.....