

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



ASSESSMENT TEST (NO BOOK TEST) - 2007/2008

DURATION – ONE (01) HOUR

Reg. No.

Date : 27. 10. 2007

Time : 4.00 – 5.00 p.m.

Answer All Questions.

Questions should be answered on the question paper itself.

PART A (30 minutes)

01. a. Karyology has gained increasing importance in systematics of plants and animals. Give the main reason.

.....

.....

- b. Indicate **one (01)** disadvantage in encountering each of the following evidence in taxonomic studies.

- i. Physiological evidence

.....

- ii. Anatomical evidence

.....

- iii. Chemical evidence

.....

- c. Indicate **two (02)** advantages of using morphological features as taxonomic evidence?

i.

ii.

- d. Give **two (02)** characters of taxonomic value in pollen grain studies.

.....

.....

e. Differentiate between a **good character** and a **key character** in plant identification.

Good character

Key character

.....	
.....	
.....	
.....	

02. Give **two (02)** main objectives of the International Code of Botanical Nomenclature.

- i.....
- ii.....

03. What is meant by the following?

a. A classification system

.....

.....

b. Speciation

.....

.....

c. Character state

.....

.....

d. Phenotypic variability

.....

.....

e. Correct name of a plant species

.....

.....

PART B - (30minutes)

04. a. Who put forward the geographic theory of speciation?
-
- b. What are the **four (04)** steps involved in speciation according to geographic theory?
- i.....
- ii.....
- iii.....
- iv.....
- c. What are the three possible out comes of the step **(iv)** mentioned in part (b) above?
- i.....
- ii.....
- iii.....
- d. Explain briefly what happens in each of the three situations mentioned in part (c) above.
- i.....
-
-
-
- ii.....
-
-
-

iii.....
.....
.....
.....

05. List out the steps involved in identification of an unknown animal/plant specimen.

.....
.....
.....
.....
.....
.....
.....

06. What are the **three (03)** sets of data on which taxonomists rely chiefly to construct a discrimination grid?

i.....
ii.....
iii.....

07. Given below are the terms used in the discrimination grid. Briefly describe them.

a. Sibling species

.....
.....

b. Same sub species

.....

.....

c. Different sub species

.....

.....

d. Individual variants of the same population.

.....

.....

-Copyrights reserved.-

