

THE OPEN UNIVERSITY OF SRI LANKA
B.Sc. / B. Ed. DEGREE PROGRAMME - LEVEL 04
BTU 2103 / BTE 4103 - SYSTEMATICS OF PLANTS AND ANIMALS
ASSESSMENT TEST (NO BOOK TEST) - 2010/2011
DURATION - ONE (01) HOUR



35

Reg. No.

Date: 23rd October 2010

Time: 4.00 - 5.00 pm

Answer All Questions. Questions should be answered on the question paper itself.

PART A (30 minutes)

01. 'Systematics is considered unique when compared to other sciences'. Give two (02) major reasons.

i.....

ii

02. Why do the taxonomists prefer to use key characters for plant identification?

.....
.....

03. a. What is meant by speciation?

.....
.....

- b. Name the two major types of speciation observed in plants?

i.....

ii

- c. How do you differentiate between the two types mentioned above?

.....

.....

.....

.....

(5)

e. List the major steps involved in one of the types mentioned.

- i.....
- ii.....
- iii.....
- iv.....

04. Give **two (02)** major ethics in writing a taxonomic paper to be published in an accepted journal.

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

05. Give **two (02)** main reasons for using Latin language for Botanical names.

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

06. What is meant by the following?

a. Biosystematics

-
-

a. Plant classification

-
-

d. Legitimate synonyms of a plant species

-
-

e. Character state

-
-

(5)

35

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PART B - (30minutes)

07. a. What is meant by phenotypic variability in organisms?

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.....

b. Name the two types of phenotypic variability.

i.....
ii

08. Differentiate between a priori and a posteriori weighting

a priori weighting

a posteriori weighting

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

09. Briefly explain how Similarity Coefficient values are used in Numerical Taxonomy?

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10. a. What is meant by identification of an animal?

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

13

5

b. Describe very briefly why you need to identify animals.

.....

.....

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.....

c. List the general steps in the identification of an unknown animal.

- i.....
- ii.....
- iii.....
- iv.....
- v.....
- vi.....

d. What is the taxonomic procedure you would follow to determine whether a given sample of animals belong to an un-described species?

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