

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) - 2008/2009



DURATION - ONE (01) HOUR

Reg. No.

Date : 01. 11. 2008

Time : 4.00 - 5.00 p.m.

Answer All Questions.

Questions should be answered on the question paper itself.

PART A (30 minutes)

01. Outline the major steps in the identification of a plant specimen

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02. a. What is nomenclature?

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- b. State **three (03)** disadvantages in using common names for plants.

i.

ii.

iii.

- c. State **three (03)** advantages in using scientific names for plants.

i.

ii.

iii.

03. a. Define the term speciation.

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b. How does true speciation differ from phyletic speciation?

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c. What are the **three (03)** possible results of the competition between gene pools during true speciation.

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

04. List the following.

b. **Five (05)** main objectives of systematics.

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

c. **Five (05)** operational steps in Numerical Taxonomy

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

05. What is meant by the following?

a. Taxonomic hierarchy

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b. Nomenclatural synonyms

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c. A priori weighting of characters

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d. Key character

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e. Type specimen

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PART B (30 minutes)



Reg. No.....

6.

i . Define the term taxonomic character.

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ii. Describe very briefly the use of taxonomic characters in systematic studies.

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iii Classify the major taxonomic characters

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iv. What is the importance of weighing a taxonomic character?

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7. What is the relationship between environment and the phenotypic characters of animals?

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ii Draw a diagram to show the relationship between animal and the environment in systematic studies.

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iii. What is the phenotypic variability?

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iv. Name two types of variability.

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v. Phenotypic variability is not much peculiar for animals. Give reasons

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