The Open University of Sri Lanka
B.Sc./B.Ed Degree Programme-Level 03-2009/10
BOU 1200 – Diversity of Plants
Assessment Test II(No Book Test)

Duration – One (01) hour **Reg.No. .....**

Date: 18th April 2010 **Time: 4.00 – 5.00 p.m.**

Answer all questions on this paper itself.

This paper contains four(04) questions and six(06) pages.

1. a. List three (03) adaptations shown by Bryophytes when transferring from water habitat to land habitat.

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b. Fill in the following table with suitable word/s.

Character	Hepatophyta	Anthocerophyta	Musci
Development of protonema			
Presence of Columella			
Presence of pseudopodium			
Mode of dehiscence of capsule			

c. Write one major function of the following in relation to *Marchantia.*

i. Chimney pore - .....

ii. Rhizoids - .....

iii. Gemmae - .....

iv. Elaters - .....

v. Calyptra - .....

2. a. State five (05) primitive features seen in the oldest members(Division- Psilopsida) of vascular plants.

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b. Name the only living Genus of horsetail.

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c. Write down five (05) important characteristics of horsetails.

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d. The most advanced ferns-Mixtae is classified into two major sub-groups. What are they and on what basis?

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e. With the help of two labeled line diagrams, illustrate the above types in part "d" with one example each in the space below.

3. a. Fill in the following table with suitable word/s.

Characteristic feature	**Monocot**	**Dicot**
Cotyledons		
Leaf venation		
No. of flower parts		
Primary vascular bundle in stem		
Presence of secondary growth		
Type of root system		
Nature of pollen grains		

b. With the help of labeled line drawings, illustrate the following types of inflorescences in the space below.

Simple raceme **Umbel** **Corymb**

Capitulum **Scorpioid cyme** **Helicoid cyme**

c. Give two important features that help for the dispersal of fruits and seeds by each of the following agents. (Give one example for each of the feature).

i. By wind

1. .....

Eg. .....

2. .....

Eg. .....

ii. By animals

1. .....

Eg. .....

2. .....

Eg. .....

iii. By water

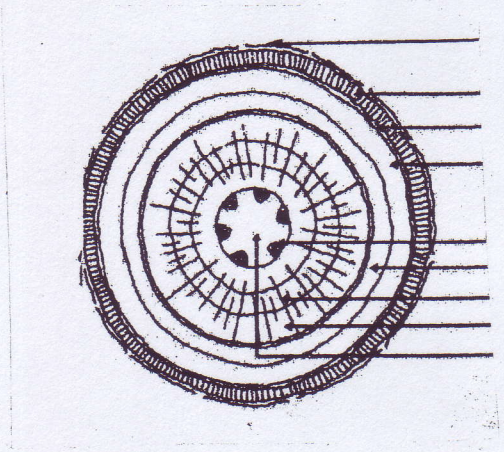
1. .....

Eg. .....

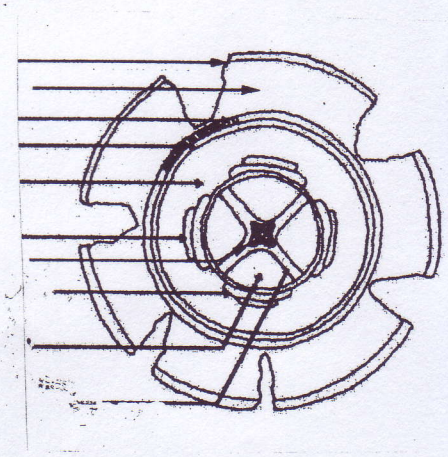
2. .....

Eg. .....

4. The following line diagrams are the cross sections of a dicot stem and a dicot root after the secondary growth. Label them fully.



Secondary growth in Dicot stem



Secondary growth in Dicot root