

This question paper contains 4 printed pages.]

5193B

Your Roll No.

B.Sc. (Hons.)/B.Sc. Prog. Life Scs./IV Sem. B

Paper – LSPT-408

Biodiversity-III – Plants

(Admissions of 2010 and onwards)

Time : 3 Hours

Maximum Marks : 75

*(Write your Roll No. on the top immediately
on receipt of this question paper.)*

*Answer five questions in all. Q. No. 1 is compulsory. All
parts of a question must be answered together.*

1. (a) Define any **five** of the following : 5
- (i) Trabeculae
 - (ii) Coenosorus
 - (iii) Capitulum
 - (iv) Peristome
 - (v) Polyembryony
 - (vi) Transfusion tissue
 - (vii) Epipetalous

[P.T.O.]

(b) Match the following : 5

A	B
Axile placentation	Poaceae
<i>Selaginella</i>	Resin
Pine	Protonema
<i>Funaria</i>	Liquile
Caryopsis	Solanaceae

(c) Write the botanical name and family of any **five** : 5

- (i) Rice
- (ii) Groundnut
- (iii) Fennel
- (iv) Coffee
- (v) Cotton
- (vi) Mustard

2. Draw labelled diagrams of any **three** : 15

- (i) L.S. *Marchantia* sporophyta
- (ii) L.S. *Selaginella* strobilus
- (iii) V.S. *Preris* sporophyll
- (iv) T.S. *Cycas* coralloid root

3. Write short notes on any **three** : 15
- (i) Adaptations of bryophytes to land habit
 - (ii) Heterospory
 - (iii) Sporangiphore of *Equisetum*
 - (iv) *Cycas* ovule
4. Differentiate between any **five** : 15
- (i) Collenchyma and sclerenchyma
 - (ii) Natural and phylogenetic systems of classification
 - (iii) Tracheids and vessels
 - (iv) Monocot and Dicot stems
 - (v) Antheridiophore and archegoniophore of *Marchantia*
 - (vi) Microsporophyll of *cycas* and *pinus*
5. (i) Discuss why Bentham and Hooker's system of classification is considered as a natural system. 5
- (ii) Describe the floral characters of Solanaceae and Brassicaceae. 5
- (iii) Name the part used and list the important uses of Black pepper and Teak. 5
6. (i) Explain the methods of asexual reproduction in *Marchantia*. 5

- (ii) *Equisetum* shows xerophytic and hydrophytic characters. Comment. 5
- (iii) Give an account of general characters of Gymnosperms. 5