

Roll No.

91047

B. Sc. Bio-Technology
1st Semester w. e. f. 2012-13
Examination – November, 2019

PLANT DIVERSITY I AND BIO PROSPECTING

Paper : BT- 102

Time : Three Hours] [Maximum Marks : 40

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any *five* questions in all. Question No. 1 is *compulsory* and attempt remaining *four* other questions selecting at least *one* from each Unit.

- 1. Compulsory question :** Answer the following questions in brief : 2 x 5 = 10
- (i) Give a botanical name of the edible mushroom.
 - (ii) What are lichens ? What is their ecological importance ?
 - (iii) What do you mean by Mycorrhiza ?

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- (iv) What is the difference between gametophyte and sporophyte.
- (v) Give the name of the casual organism of citrus canker disease ?

UNIT – I

- 2.** Briefly answer the following questions : 7.5
- (a) Pigments in green and red algae
 - (b) Nannandrous Odogonium
- 3.** Give a graphic representation of the life cycle in Polysiphonia. 7.5

UNIT – II

- 4.** Mention characteristic features of Fungi along with their economic importance. 7.5
- 5.** Briefly explain the following :
- (a) Nutrition in fungi
 - (b) Sexual reproduction in Saccharomyces

UNIT – III

- 6.** Write the casual organisms, symptoms and control measures of the following plant diseases : 7.5
- (a) Late blight of potato
 - (b) Red rot of sugarcane
- 7.** Briefly explain the following :
- (a) In what respects do lichens differ from and agree with the fungi ?
 - (b) Differentiate between rusts and smuts.

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UNIT – IV

8. Draw well - labelled diagrams of : 7.5
(a) V. S. of *Marchantia* thallus through a gemma cup
(b) L. S. of *Funaria* capsule
9. Give a graphic representation of the life cycle in *Funaria*. 7.5
