#### 2019

### B.Sc. (General)

# 2nd Semester Examination

#### BOTANY

## Paper - DSC 1BT

Full Marks: 40

Time: 2 Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

1. Answer any five questions of the following:

 $5 \times 2 = 10$ 

- (a) Define edge effect.
- (b) Write two differences between Food Chain and Food Web.
- (c) Define endemism.
- (d) What is meant by soil profile?
- (e) What is Holotype?

- (f) What is Natural system of classification? Give example.
- (g) What are OTUs?
- (h) What is neo endemism?
- 2. Answer any four questions of the following:

 $4 \times 5 = 20$ 

- (a) Write down the morphological and anatomical adaptations of hydrophytes.  $2\frac{1}{2} + 2\frac{1}{2}$
- (b) Explain the role of palynology in Taxonomy. 5
- (c) What is Botanical garden? Write the functions of Botonical gardens. 2+3
- (d) With schematic diagram explain in briefly the phosphorus cycle. 5
- (e) Define succession. Briefly explain the process of succession in plants. 1+4
- (f) Write the differences between phenogram and cladogram.5

3. Answer any one question of the following:

 $1 \times 10 = 10$ 

- (a) What is phylogenetic system of classification? Briefly describe Engler and Prantl's is system of classification upto series. Write the merits and demerits of this classification. 1+6+1½+1½
- (b) Write the principles of ICN. Describe the different criteria for the rejection of names. 6+4

