Seat No. : _____

# JE-105

**January-2024**

**B.Sc., Sem.-I**

**DSC-C-BOT(111T) : Botany**
**(Introduction Botany)**

**Time : 2:00 Hours]** **[Max. Marks : 50**

**Instructions :** (1) The numbers to the right of each question show marks of those questions.
(2) Illustrate answers with neat and labelled diagrams.
(3) Illustrate answers with question number which is shown in question paper.

1. Describe :
   (i) Components of Pond ecosystem 5
   (ii) Parasitism 5

**OR**

1. Describe :
   (i) Branches of Ecology 5
   (ii) Importance of Biodiversity 5

2. Describe :
   (i) Soil Profile 5
   (ii) Soil conservation 5

**OR**

2. Describe :
   (i) Importance of Soil 5
   (ii) Soil erosion 5

3. Describe :
   (i) Spirogyra-Scalariform conjugation 5
   (ii) Types of lichen 5

**OR**

3. Describe :
   (i) Nostoc-heterocyst 5
   (ii) Mucor-Asexul Reproduction 5

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4. Describe :

(i) Mendel's dihybrid experiment 5

(ii) Complete Dominance 5

**OR**

4. Describe :

(i) Cytoplasmic inheritance in Mirabilis 5

(ii) Write Mendel's laws of inheritance 5

5. Answer any **ten** in short : 10

(1) Which types of lateral conjugations are found in Spirogyra ?

(2) Name the pigments of Nostoc.

(3) Name the parts of mature basidiocarp of Agaricaus.

(4) What is incomplete dominance ?

(5) Write genotypic and phenotypic ratio of Mendel's monohybrid experiment.

(6) What are dominant and recessive genes ?

(7) Give an example of protoco-operation.

(8) Give names of Nitrogen fixing bacteria.

(9) Define saprophyte.

(10) Define soil.

(11) Name the types of Natural Ecosystem.

(12) Write names of insectivorous plants.

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