Roll No. .....

Total No. of Questions : **9**] [Total No. of Printed Pages : **4**

**(2034)**

# UG (CBCS) Ist Year Annual Examination

# 2709

## B.Sc. BOTANY

**[Biodiversity (Algae, Microbes, Fungi and Archegoniates)]**

(Core)

**Paper : BOTA-101**

**Time : 3 Hours]** **[Maximum Marks : 50**

***Note*** :– Attempt *five* questions in all. Q. No. **1** is compulsory. Attempt *one* question each from Sections A, B, C and D. Draw well-labelled diagrams wherever necessary. All questions carry equal marks.

**(Compulsory Question)**

1. Do as directed :

   (i) Viruses that attack bacteria are called ..... .

   (ii) Name the comma shaped bacteria.

(iii) Name the pigments responsible for red colour of Rhodophyta.

(iv) Fruiting body of Polysiphonia is called ..... .

(v) Late blight of Potato is caused by ..... .

(vi) Name the stages of Puccinia on wheat plant.

(vii) Rhizoids and Marchantia are ..... in nature.

(viii) Name the lichens that cause forest fire.

(ix) Give botanical name of Chilgoza pine.

(x) Spores are shed at ..... cell stage in Pinus.

1×10=10

**Section–A**

2. (a) Describe in detail the range of thallus organisation in algae.

(b) Explain the structure of vegetative thallus of Vaucheria.

5+5

*Or*

3. (a) Discuss in detail the life Cycle of nannandrous form of Oedogonium.

(b) Give economic importance of algae.

7+3

## Section–B

4. (a) Discuss sexual reproduction in Rhizopus.

   (b) Draw neat, labelled diagram of fruiting body of Agaricus. Define fairy rings. 5+5

*Or*

5. (a) Explain the special vegetative structures of Lichens.

   (b) Describe the life history of pathogen causing Apple Scab. Give control measures. 5+5

## Section–C

6. (a) Explain lytic and lysogenic cycles.

   (b) Draw labelled diagram of T.S. of Marchantia thallus. 6+4

*Or*

7. (a) What is Protonema ? Discuss the structure and function and protonema in Funaria.

   (b) Define and explain the process of conjugation in bacteria. 5+5

## Section–D

8. (a) Explain the process of reproduction and spore dispersal mechanism in Adiantum.

   (b) Draw T.S. of Pinus needle and discuss its xerophytic characters. 6+4

*Or*

9. (a) Draw neat and labelled diagram of L.S. of mature cycas ovule.

   (b) Give economic importance of gymnosperm and pteridophytes. 5+5