

Roll No. ....

(011/17-D)

**5164**

**B. Sc. EXAMINATION**

(First Semester)

**BOTANY**

Paper I

Diversity of Microbes

*Time : Three Hours*

*Maximum Marks : 40*

**Note :** Attempt *Five* questions in all, selecting *two* questions from each Unit. Q. No. 1 is compulsory (short answer type). All questions carry equal marks.

1. (a) Name two plant diseases caused by bacteria.
- (b) Name an Alga which grows in symbiotic association with Azolla Plant.
- (c) Why volvox is called Rolling Alga' ?

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- (d) Name an edible fungus.
- (e) Name an Algae which produces a ring of flagella in zoospore.
- (f) What is Samatogamy ?
- (g) What is Reserve food in Fungus ?
- (h) What is Full Form of HIV ? 1×8

### Unit I

- 2. Write short notes on the following : 3+5=8
  - (a) Coenobium
  - (b) Fertilization in Volvox.
- 3. Discuss sexual reproduction in Oedogonium (Nannandrus sp.) with suitable diagram. 8
- 4. Describe special features in structure and life history of vaucheria. Discuss its systematic position. 8
- 5. Compare the phenomenon of fertilization of Ectocarpus and polysiphonia. 8

## Unit II

6. Write short notes on the following : 8
- (a) Lytic life-cycle.
  - (b) TMV. 4+4=8
7. What is Heterothallism ? Explain with reference to the life-history of Mucor. 8
8. Write short notes on the following : 4+4=8
- (a) Development of Basidium and Basidiospores.
  - (b) Asexual Reproduction in Lichens.
9. (a) Discuss vegetative structure of Penicillium.
- (b) Explain stages of Rust on Barberry. 3+5=8