

## SEMESTER-I

Max. Marks – 40+10  
Time- 3 Hrs.

### PAPER –I DIVERSITY OF MICROBES

**Note:** Attempt five questions in all, selecting two questions from each unit.

**Question No. 1 is compulsory (short answer type).**

**Nine questions are to be set spread over the entire syllabus. All questions carry equal marks.**

#### UNIT-I

**Bacteria :** Structure, nutrition, reproduction and economic importance; general account of cyanobacteria (with reference to *Nostoc*).

**Algae:** General characters, classification (upto classes) and economic importance; important features and life-history (excluding development) of *Volvox*, *Oedogonium* (Chlorophyceae), *Vaucheria* (Xanthophyceae), *Ectocarpus* (Phaeophyceae) and *Polysiphonia* (Rhodophyceae).

#### UNIT-II

**Viruses:** General account of Viruses including structure of TMV and Bacteriophages.

**Fungi:** General characters, classification (upto classes) and economic importance; important features and life-history of *Phytophthora* (Mastigomycotina), *Mucor* (Zygomycotina), *Penicillium* (Ascomycotina), *Puccinia*, *Agaricus* (Basidiomycotina), *Colletotrichum* (Deuteromycotina); General account of Lichens.