

M.Sc.(Botany) (NEP Pattern) Semester-I  
**NEP-01 / 01MSCB1 Paper-I - General Microbiology, Phycology and Mycology**

P. Pages : 1

Time : Three Hours



**GUG/W/24/15061**

Max. Marks : 80

- 
- Notes : 1. All questions are compulsory and carry equal marks.  
2. Illustrate your answers with suitable examples and diagrams.

- 1.** Write properties, Morphology and Ultrastructure of Tobacco Mosaic Viruses. **16**  
**OR**  
Write notes on:  
a) Contribution of Ivanovsky and Jenner. **8**  
b) Ultrastructure and Reproduction of Gloetrichia. **8**
- 2.** Describe the details on thallus organization in algae. **16**  
**OR**  
a) Sexual reproduction in algae. **8**  
b) Pigment, reserved food and flagella of Phaeophyta and chlorophyta. **8**
- 3.** Give an account of symptoms, structure and reproduction of phytophthora. **16**  
**OR**  
Write notes on:  
a) Heterothallism and heterokaryosis. **8**  
b) Asexual and sexual reproduction of Mucol. **8**
- 4.** Describe the life cycle of Puccinia. **16**  
**OR**  
Write notes on-  
a) Black arm of cotton and gummosis. **8**  
b) Smut of Jowar and leaf curl of Papaya. **8**
- 5.** Write short notes on:  
a) Archaeobacteria. **4**  
b) Contribution of M.O.P. Iyengar. **4**  
c) Parasexual cycle. **4**  
d) Ascus and ascospore. **4**

\*\*\*\*\*