

Seat Number

--	--	--	--	--	--



कंठस्थ - 012

**BOTANY PAPER - I : BOT-111 : BOTANY - I**  
**Bacteria, Viruses & Algae**  
**(114101)**

P. Pages : 3

Time : Two Hours

Max. Marks : 60

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Figures to the right indicate full marks.
5. All questions are compulsory.
6. Draw neat diagrams wherever necessary.

1. a) Attempt the following any six.

6

- 1) Who discovered bacteria?  
a) Leeuwenhoek                      b) Pasteur  
c) Koch                                d) Mendel
- 2) Bacterial cell is-----  
a) Eukaryotic                        b) Prokaryotic  
c) Pseudokaryotic                d) Multikaryotic
- 3) Viruses are-----  
a) Heteroscopic                    b) Ultramicroscopic  
c) Macroscopic                    d) Euroscopic
- 4) Algae constitute an important group of-----  
a) Thallophyta                      b) Bryophyta  
c) Pteridophyta                    d) Angiosperms
- 5) Spirogyra belongs to the class-----  
a) Chlorophyceae                   b) Phaeophyceae  
c) Cyanophyceae                   d) Rhodophyceae
- 6) Sargassum belongs to the class-----  
a) Phaeophyceae                   b) Charophyceae  
c) Cyanophyceae                   d) Rhodophyceae

कंठस्थ - 012

1

P.T.O

- 7) Study of algae is known as-----.
- |              |             |
|--------------|-------------|
| a) Mycology  | b) Cytology |
| c) Phycology | d) Ecology  |
- 8) 'Leaf curl of Tomato' disease is caused by-----
- |             |            |
|-------------|------------|
| a) Algae    | b) Fungi   |
| c) Bacteria | d) Viruses |

b) Explain the following in one sentence **any six**.

6

- 1) Define cocci bacteria.
- 2) Explain the mode of nutrition in bacteria.
- 3) Which is causal organism of citrus canker disease.
- 4) Give the chemical composition of capsid.
- 5) Define lytic cycle.
- 6) What are aplanospores.
- 7) Explain planktonic habit of algae.
- 8) Define fragmentation.

2. Attempt the following **any six**.

12

- 1) Give any two characters of bacteria.
- 2) Symptoms of citrus canker disease.
- 3) Asexual reproduction in bacteria.
- 4) Any two living characters of viruses.
- 5) Sketch & label bacteriophage.
- 6) Siphonaceous thallus in algae.
- 7) Asexual reproduction in Spirogyra.
- 8) Use of airbladder in Sargassum.
- 9) Palmella stage.

3. Attempt the following **any four**. 12
- 1) Sexual reproduction in bacteria.
  - 2) Sketch & label ultrastructure of bacterial cell.
  - 3) Any three nonliving characters of viruses.
  - 4) Symptoms of Yellow Vein Mosaic disease of Lady's Finger.
  - 5) Occurrence of algae.
  - 6) Male conceptacle in Sargassum.
4. Attempt the following **any three**. 12
- 1) Characters of div. Cyanophyta.
  - 2) Sketch & label external morphology of Sargassum.
  - 3) General characters of algae.
  - 4) Symptoms & control measures of 'Leaf Curl of Tomato'.
  - 5) Describe Gram positive & Gram negative bacteria.
5. Attempt the following **any two**. 12
- 1) Give the causal organism, symptoms & control measures of 'Black Arm' disease of cotton.
  - 2) Explain steps in reproduction of bacteriophage.
  - 3) Give economic importance of algae in Agriculture, Industry & Medicine.

\*\*\*\*\*