

**PD-544**  
**M.Sc. Biotechnology**  
**1st Semester Examination, Dec 2020**  
**Paper-1**  
**General Microbiology**

Time: Three Hours]

[Maximum Marks: 80  
[Minimum Pass Marks: 29

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Note: Answer from **both** the sections as directed. The figures in the right-hand margin indicate marks

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**Section-A**

1. **Answer the following questions:** 1X10
- (a) What are Viroids?
  - (b) What are Prions?
  - (c) Name any one Halophile.
  - (d) Name any one Lactic acid bacteria.
  - (e) Name one endospore forming rod shaped bacteria.
  - (f) What is the animal host that transmits rabies?
  - (g) Define antibiotics.
  - (h) What is acetogenesis?
  - (i) Name one chemolithotroph.
  - (j) Secondary metabolites were produced in which phase of bacterial growth?
2. **Answer the following questions:** 2X5
- (a) Write about Bergey's Manual.
  - (b) Write a note on Actinomycetes.
  - (c) Write about fermentation diversity.
  - (d) Write about Synchronous growth.
  - (e) Write a note on Tuberculosis.

**Section - B**  
**Unit-I**

3. **Answer the following questions:** 15X4
- Explain in detail on Plant and Animal viruses.

OR

Write an essay on cell wall and cell membrane of eubacteria.

**Unit-II**

4. Write an essay on Acetic acid and propionic acid bacteria.

OR

Explain in detail on Rickettsia and Chlamydia.

**Unit-III**

5. Explain about environmental factors that affects growth of bacteria.

OR

Write an essay on Nitrogen fixation.

**Unit-IV**

6. Write an essay on host-parasite relationship.

OR

Write an essay on respiratory infections caused by bacteria and viruses.

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