

Roll No.

Total Pages : 2

758103

January 2023

M.Sc. (Life Sciences) Ist SEMESTER

General Microbiology (MLS 103)

Time : 3 Hours]

[Max. Marks : 75

Instructions :

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*
2. *Answer any four questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*
4. *Draw well labelled diagram wherever required in the answers.*

PART-A

1. (a) Cyanobacteria. (1.5)
- (b) Prions. (1.5)
- (c) Adenovirus. (1.5)
- (d) PGPR. (1.5)
- (e) Spoilage of food. (1.5)
- (f) Basis of classifying virus. (1.5)
- (g) Gaspakjar. (1.5)
- (h) Economic importance of Algae. (1.5)

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- (i) Golden era of microbiology. (1.5)
- (j) Life cycle of Basidiomycetes. (1.5)

PART-B

2. (a) Explain sterilization and its various types. Write a note on growth curve. (10)
- (b) Explain mycoplasma and mycobacterium with example. (5)
3. (a) Discuss medically and industrially important microbes. (5)
- (b) Discuss the features for bacterial classification as per Bergy's Manual of systemic bacteriology. (10)
4. Distinguish between ecto and endo mycorrhizae. In detail explain legume rhizobia symbiosis. (15)
5. (a) Explain Food borne disease with examples. (5)
- (b) Explain in detail retrovirus. (10)
6. (a) With well labelled diagram explain endospore. (10)
- (b) Distinguish between Gram Positive and Gram Negative Bacteria. (5)
7. What is pure culture? Explain the various techniques for isolating and preserving microbes. (15)
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