P-501

Total Pages: 3 Roll No.

EVS-507

Enviornmental Microbiology and Biotechnology

(MSCES-21)

IInd Semester Examination, 2023 (June)

Time: 2 Hours] Max. Marks: 70

Note: This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

SECTION-A

(Long Answer Type Questions)

Note: Section 'A' contains Five (05) long answer type questions of Nineteen (19) marks each. Learners are required to answer any Two (02) questions only.

 $(2 \times 19 = 38)$

1. What are different methods of gene cloning?

- **2.** What are GEO ? State in detail about their application for mankind.
- **3.** How are protein biofertilizers prepared? Describe how they are used for waste management.
- **4.** Explain the mechanism of detoxification. How highly concentrated toxic pollutants are degraded?
- **5.** Describe important characteristics of protists and viruses. Summarise their effect on human health.

SECTION-B

(Short Answer Type Questions)

Note: Section 'B' contains Eight (08) short answer type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only. (4×8=32)

- 1. Differentiate between batch and continuous culture.
- **2.** What are ethical issues associated with development of GEO?
- **3.** What are protein fertilizer? How does solid waste is degraded?

- **4.** What are different methods of biodegradation of toxic pollutants?
- **5.** What are nuclic acids? Describe salient features of their structure.
- **6.** What are different regulatory measure policy and legislation for release of GEO in different countries?
- 7. Differetiate between eukaryotic and prokaryotic cell.
- **8.** Write short notes on:
 - (a) Chromosome.
 - (b) Plasmid.