Total Pages : 3

Roll No.

EVS-507

Environmental Microbiology and Biotechnology

(MSCES-21)

2nd Semester Examination, 2022 (Dec.)

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. (2×19=38)

1. What are Xenobiotic and Recalcitrant Compounds? Discuss their different type and sources.

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[P.T.O.

- **2.** Describe in detail the structure of Prokaryotic and eukaryotic cell with diagram.
- 3. What is recombinant DNA? Enlist its uses for human benefit.
- 4. Define:
 - (a) Gene.
 - (b) Plasmid.
 - (c) GEO.
 - (d) Bath Culture.
- **5.** What is detoxification of pollutants? How does highly toxic pollutants are treated?

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.** What is role of extracellular polymer in detoxification of pollutants?

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2. What are health risks associated with solid waste?

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- **3.** What is MPN index and its relation with purity of drinking water?
- 4. What are factors affecting toxicity in aquatic system?
- 5. Describe different growth phases of microbial growth.
- 6. Briefly describe Ecotoxicology in aquatic system.
- 7. What is batch and continuous culture?
- **8.** State different application of GEO.