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Name:

Reg.No:

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2023

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19P ZOL3 C09 - MICROBIOLOGY AND BIOTECHNOLOGY

(Zoology)

(2019 Admission onwards)

Time : 3 Hours

Maximum : 30 Weightage

Part-A

Answer any *four* questions. Each question carries 2 weightage.

- 1. Explain the use of petroff, Haussuer counting chamber and spread plate.
- 2. What is a biogas plant?
- 3. Define Viruses.
- 4. Define Sanger's method.
- 5. Discuss the applications of Biotechnology in forensic medicine.
- 6. Mention about the application of biotechnology on removal of oil spills.
- 7. Explain about the social acceptance of biotechnology.

 $(4 \times 2 = 8$ Weightage)

Part-B

Answer any *four* questions. Each question carries 3 weightage.

- 8. Explain history of microbiology.
- 9. Explain nutritional requirements and nutritional types.
- 10. Differentiate between sterilization and disinfection.
- 11. Discuss the importance of inverse PCR and its steps.
- 12. Explain the details of RFLP.
- 13. Describe the procedure of virus mediated lipofection method.
- 14. Explain about Biofertilizers.

 $(4 \times 3 = 12 \text{ Weightage})$

Part-C

Answer any *two* questions. Each question carries 5 weightage.

15. Describe in detail about the human diseases caused by the bacteria.

- 16. Describe the various steps involved in cloning.
- 17. Explain the mechanism of animal cell culture.
- 18. Discuss the details of Intellectual Property Rights.

 $(2 \times 5 = 10 \text{ Weightage})$
