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# THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2024

(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 types of viruses.
- 2. Define cloning vectors.
- 3. Discuss about molecular probes.
- 4. Discuss about DNA finerprinting.
- 5. Explain about RNAi.
- 6. Mention about the application of biotechnology on removal of oil spills.
- 7. Define TRIPS.

 $(4 \times 2 = 8 \text{ Weightage})$ 

### Part-B

Answer any four questions. Each question carries 3 weightage.

- 8. Desribe culture media.
- 9. Explain about antibiotics with any two examples.
- 10. Explain the details of Microsatellites (SSR).
- 11. Discuss about DNA sequencing.
- 12. Describe the procedure of Short gun method.
- 13. Describe Baculovirus.
- 14. Discuss the details on ethical and social implications of genetic engineering.

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

#### Part-C

Answer any two questions. Each question carries 5 weightage.

- 15. Describe major characteristics used in microbial taxonomy with an account on Bergey's mannual.
- 16. Explain microbial growth.

- 17. Discuss in detail various fields of environmental microbiology.
- 18. Discuss the variants of PCR.

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

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