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S - 2922

Reg. No. :

First Semester B.Sc. Degree Examination, January 2024 Career Related First Degree Programme under CBCSS

Group 2(a): Botany and Biotechnology

Foundation Course - I

BB 1121 : METHODOLOGY AND PERSPECTIVES OF BIOTECHNOLOGY (2019 – 2022 Admission)

Time: 3 Hours

Max. Marks: 80

SECTION A

Answer all questions in one word or sentence. Each carries 1 mark.

- Define hypothesis.
- 2. What is an experimental design?
- 3. What is secondary data?
- Define median.
- State significance of graphical data presentation.
- 6. What is NICNET?
- 7. Name any one biotechnology company in India.

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- 8. Give two examples for Genetically modified crop.
- 9. Expand GMP.
- 10. Define copyright.

 $(10 \times 1 = 10 \text{ Marks})$

SECTION B

Answer any eight questions. Short answer (not to exceed one paragraph). Each carries 2 marks.

- 11. What is patent?
- Elaborate ethical issues in recombinant DNA technology.
- 13. Comment on Golden rice.
- 14. What are application softwares? Provide examples.
- 15. Brief a note on BRNET.
- 16. Mention significance of controlled experiment.
- 17. What is a sample design?
- 18. Give examples for primary and secondary data.
- 19. Comment on science direct.
- 20. Write a brief note impact factor.
- 21. List the components of a Research Project proposal.
- 22. What is citation?

 $(8 \times 2 = 16 \text{ Marks})$

SECTION C

Answer any six questions. Each question carries 4 marks. (Answer not to exceed 120 words)

- 23. Discuss the need of scientific research.
- 24. What is research ethics?
- 25. List any four applications of industrial biotechnology.
- 26. How biotechnology helps in food security?
- 27. What is gene cloning?
- 28. How monoclonal antibodies are produced?
- 29. Elaborate the potential of E commerce.
- 30. Comment on SWAYAM.
- 31. Discuss internal as a knowledge repository.

 $(6 \times 4 = 24 \text{ Marks})$

SECTION D

Answer any two questions. Each question carries 15 marks. (Answer not to exceed 3 pages)

- 32. Explain various steps in scientific methodology.
- 33. Elaborate various methods of data analysis using statistical tools.
- 34. Explain the role of IT in education and learning.
- 35. Discuss the scope of biotechnology in agriculture and medicine.

 $(2 \times 15 = 30 \text{ Marks})$