

Reg. No. :

Name :

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.

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

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

(10 × 1 = 10 Marks)

SECTION B

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

11. What is patent?
12. 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 × 2 = 16 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 internet as a knowledge repository.

(6 × 4 = 24 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 × 15 = 30 Marks)