

C 40505

(Pages : 2)

Name.....

Reg. No.....

SIXTH SEMESTER U.G. DEGREE EXAMINATION, MARCH 2023

(CBCSS—UG)

Biotechnology

BTY 6B 15—RECOMBINANT DNA TECHNOLOGY AND BIOINFORMATICS

(2019 Admission onwards)

Time : Two Hours

Maximum : 60 Marks

*Draw diagrams wherever necessary.***Section A***Write briefly on the following.**Each question carries 2 marks.*

1. What is a biological data base ?
2. What is a shuttle vector ?
3. What are the selectable markers in pBR322 ?
4. What is terminator technology ?
5. Comment on differential screening for library screening ?
6. What is nested PCR ?
7. What is a co-dominant molecular marker. Give an example.
8. What are thermostable polymerases ?
9. What is Electroporation ?
10. What is SEQUIN ?
11. What is CLUSTAL ?
12. Comment on adapters and linkers ?

(Ceiling 20 marks)

Turn over

Section B

*Write a paragraph on following.
Each question carries 5 marks.
Ceiling 30 marks.*

13. Explain the principle and procedure of Sangers sequencing ?
14. What are the different methods of plant cell transformation ?
15. Explain briefly the principle and procedure of qRTPCR.
16. What are the different methods of DNA probe labelling
17. Explain the usefulness of molecular markers in research.
18. What are the applications of transgenic animals ?
19. Narrate the principle and procedure of Blue White colony screening.

Section C

*Write an essay on the following.
Each question carries 10 marks.*

20. What are the different classes of restriction endonucleases ?
21. What are the applications of PCR ?

(1 × 10)