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(20426)

Roll No.

B.Sc.(Bio-Tech.)-II Year

3464

B.Sc. (Biotechnology)

Examination, April-2026

Fundamental of Computers and

Bioinformatics

(B-201)

(B.Sc. Biotech.)

Time : Three Hours]

[Maximum Marks : 50

Note : Attempt any **five** questions. **All**

questions carries **10** marks.

1. Define a computer and explain its fundamental components. Discuss the basic operations a computer performs.

10

P.T.O.

- ✓ 2. Explain the difference between input and output devices, providing examples of each. Discuss how these devices are crucial for a computer system's functionality. 10
3. What is a hybrid computer? Explain: 10
 - (i) Its components
 - (ii) How it works,
 - (iii) Advantages, and provide examples of its use.
4. Describe the OSI model, outlining the functions of each layer. 10
- ✓ 5. Explain the concept of network topology and discuss different types of Network topologies. 10
6. Describe the origin of internet, and explain the significance of TCP/IP in the development of internet. 10

- ✓7. Describe the key differences between the internet and the World Wide Web. What are some of the challenges and opportunities presented by the internet's continued evolution? 10
8. Discuss the impact of the internet and bioinformatics on modern biotechnology. How has it facilitated research, development and accessibility in this field? 10
9. Explain in details about the various databases in Biotechnology/ Bioinformatics. Differentiate between primary and secondary databases with examples. 10
- ✓10. Discuss the application of bioinformatics in drug discovery. How is bioinformatics used in personalised medicine? 10
