

25082

M.Sc. DEGREE EXAMINATION, APRIL 2018.

Biotechnology

SECOND SEMESTER

Paper-II — COMPUTER APPLICATIONS AND BIostatISTICS

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

1. Software components.
2. DOS.
3. History of Bioinformatics.
4. Comparative genomics.
5. Group data.
6. Measures of skewness.
7. Correlation coefficient.
8. Uses of statistical packages.

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

9. Give a detailed note on various types of hardware components and storage devices.
Or
10. Explain the basics of operating systems and different operating systems used in computers till date.
11. Discuss about multiple sequence alignment and various scoring methods used in construction of phylogenetic trees.
Or
12. Explain the various steps involved in homology modeling process along with its applications.

13. Discuss the measures of dispersion with suitable examples.

Or

14. Describe in detail about construction of frequency distribution for biological data.

15. Explain briefly the significance of T-test with suitable example.

Or

16. Discuss in detail about the role of two-way ANOVA in analyzing statistical models.

