

Reg. No

Name

23U659

B. Sc. DEGREE END SEMESTER EXAMINATION : MARCH 2023

SEMESTER 6 : ZOOLOGY

COURSE : 19U6CRZOO12: GENERAL INFORMATICS, BIOINFORMATICS, BIostatISTICS AND RESEARCH METHODOLOGY

(For Regular - 2020 Admission and Supplementary - 2019 Admission)

Time : Three Hours

Max. Marks: 60

PART A

Answer All (1 mark each)

1. What is EEPROM?
2. What is a mainframe computer?
3. What is the advantage of open source softwares?
4. What is a structure database? Name any one
5. What is PAM?
6. What is meant by protein structure prediction?
7. What are SNPs?
8. What is qualitative data?

(1 x 8 = 8)

PART B

Answer any 6 (2 marks each)

9. Explain OMIM
10. Explain the working of GENSCAN
11. What are the major focuses of Human Brain Project?
12. Mention the advantages and disadvantages of sampling.
13. Find Median
10,15,25,8,16,21,17,19,18,26
14. Explain the technique of paper chromatography
15. Explain the factors that influence the resolution of an optical instrument/microscope?
16. What are the differences between a seminar and conference?

(2 x 6 = 12)

PART C

Answer any 4 (4 marks each)

17. Elaborate on the steps involved in knowledge based methods of protein structure prediction
18. Discuss the drug discovery pipeline
19. Find mean.

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|-----------|------|-------|-------|-------|-------|
| Class | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| Frequency | 5 | 7 | 10 | 6 | 4 |

20. Discuss the components of a colorimeter. Use good quality diagrams
21. Discuss the working of a phase contrast microscope
22. Explain the techniques for improving the presentation of your research report

(4 x 4 = 16)

PART D

Answer any 2 (12 marks each)

23. Find Mean deviation.

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| Age group | 0-4 | 4-8 | 8-12 | 12-16 | 16-20 | 20-24 |
| Frequency | 2 | 6 | 10 | 14 | 18 | 22 |

24. Elaborate on different types of memories and data storage devices of a modern computer
25. Elaborate on any three separation techniques you have studied
26. Discuss different methods for research communication

(12 x 2 = 24)