

**B. SC. DEGREE END SEMESTER EXAMINATION - MARCH 2023****SEMESTER – 6: ZOOLOGY (CORE COURSE)****COURSE: 15U6CRZOO12 –: GENERAL INFORMATICS, BIOINFORMATICS, BIO STATISTICS AND RESEARCH METHODOLOGY***(Common for Supplementary 2015/2016/2017/2018 Admissions)*

Time: Three Hours

Max. Marks: 60

**PART A****Answer all questions**

1. Expand DDBJ.
2. Name a database which searches the similarity between amino acid sequences?
3. Expand SNP and ORF.
4. What is range?
5. Define molarity.
6. Define input devices.
7. What is secondary data?
8. Name a technique uses sedimentation to separate molecules.

(1 x 8 = 8)

**PART B****Answer any 6 Questions**

9. What is DOS? Define with examples.
10. What is booting state? Mention its importance.
11. What is phase contrast microscopy? Mention its advantages.
12. Define fluorescence.
13. Explain the principle behind electrophoresis.
14. Differentiate between conference and workshop.
15. What is the significance of metric system in science?
16. Explain measures of dispersion.

(2 x 6 = 12)

**PART C****Answer any 4 Questions**

17. What is correlation? Explain the types.
18. Give an account on X-ray crystallography.
19. Explain research communication with its significance in science.
20. Explain the principle and applications of a colorimeter.
21. Expand and differentiate BLAST and FASTA.
22. Calculate mean and median of the given data.

Class	60 - 70	70 - 80	80 - 90	90 - 100
Frequency	12	10	5	3

(5 x 4 = 20)

**PART D**

**Answer any 2**

23. Write an essay on the pros and cons of internet.
24. Define hypothesis with its types and write an essay on how hypothesis influence a scientific research.
25. Write an essay on any two of the separation techniques.
26. What is microscopy? Write an essay on the types, advantages and disadvantages of microscopy.

(10 x 2 = 20)

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