B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2018

SEMESTER – 6: ZOOLOGY (CORE COURSE)

COURSE: **15U6CRZOO12: GENERAL INFORMATICS, BIOINFORMATICS,**

BIOSTATISTICS AND RESEARCH METHODOLOGY

(For Regular - 2015 Admission)

Time: Three Hours   Max. Marks: 60

PART A
Answer all questions

1. What is Rasmol?
2. Define OMIM.
3. What is pairwise alignment?
4. What is standard deviation?
5. Mention any one means of graphical representation of data
6. Which is the technique used for separation of particles based on sedimentation rate?
7. Expand DDBJ.
8. What is ppm?   (1 x 8 = 8)

PART B
Answer any Six

9. Define central tendency. Mention its measures.
10. Mention the advantages of sampling over census
11. Find the mean deviaton

    25,63,85,75,62,70,83,28,30,12
12. Give the principle involved in spectrophotometry.
13. Give an account of the features of BLAST engine.
14. What is Human Brain Project?
15. Differentiate between local and global sequence alignment.
16. What is homology modelling?   (2 x 6 = 12)

PART C
Answer any Four

17. What is dispersion? Explain any two measures of dispersion with their merits and demerits.
18. Give an account of the concept and applications of multiple sequence alignment.
19. Explain molecular phylogenetics.
20. Write a note on computer memory.
21. Describe any three analytical techniques used in Biological research.
22. Write a note on research report writing.   **(**5 x 4 = 20)

PART D

Answer any Two

23. Give an account of Computer Aided Drug Discovery.

24. Find median and mode

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	3	10	15	20	12	7	3

25. Give a description of popular databases in Bioinformatics.

26. Write an essay on the principle and uses of different types of microscopy.   (10 x 2 = 20)

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