

SECOND SEMESTER M.A./1VI.Sc./M.Com. DEGREE EXAMINATION
JUNE 2019

(CUCSS)

General Biotechnology

GB 2C 4—BIOSTATISTICS AND BIOINFORMATICS

(2010 Admissions)

Time : Three Hours_____

Maximum : 36 Weightage

Section A (Very Short Answer Type)

Answer all questions.

Each question carries a weightage of 1.

1. What are protein structure databases ?
2. Write briefly on NCBI.
3. Explain dot plot.
4. Explain global alignment.
5. What is RDBMS ?
6. What is stratified sampling ?
7. Explain skewness.
8. Write a note on Coefficient of variation.
9. What is less than cumulative frequency curve ?
10. What is dependent variable ?

(10 x 1 = 10 weightage)

Section B (Paragraph Type/Short Answer Type)

Answer any seven questions.

Each question carries a weightage of 2.

11. Explain datamining of biological databases.
12. Comment on the major web resources for bioinformatics.
13. Explain primer design.
14. Write briefly on the secondary structure of proteins.

Turn over

15. Explain correlation analysis.
16. Explain the use of MSEXCEL in statistical analysis.
17. Write an account on frequency distribution.
18. Briefly explain normal distribution and indicate its chief characteristic.
19. Give an account of ANOVA and mention its significance.
20. Distinguish between frequency curve and ogive.

(7 x 2 = 14 weightage)

Section C (Essay Type)

Answer any two questions.

Each question carries a weightage of 6.

21. Explain homology modelling and its role in protein structure prediction .
22. Write an account of frequency distribution.
23. Write an essay on computer oriented statistical techniques.

(2 x 6 = 12 weightage)