

B.Sc. (CBCS) DEGREE EXAMINATION,
APRIL 2021.

Sixth Semester

Zoology — Core

BIostatistics, COMPUTER APPLICATIONS AND
BIOINFORMATICS

(For those who joined in July 2021 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. Choose the Pictorial representation of data
(a) cardogram (b) pictogram
(c) histogram (d) line diagram

7. Sequence alignment is also known as _____
(a) Pair wise alignment
(b) Multiple alignment
(c) Database
(d) FASTA

8. Select the essential infrastructure underpinning in biological research.
(a) computer science
(b) medicine
(c) bioinformatics
(d) statistics

9. What is a molecular graphic program intended for visualization of proteins and nucleic acids?
(a) Phylogenetics analysis tool
(b) RasMol
(c) MRI
(d) Gamma rays

10. The following one is used to find regions of local similarity between sequences.
(a) BLAST (b) SWISS PROT
(c) NCBI (d) ELISA

2. Choose the name of headings of horizontal rows in Table _____
(a) heading (b) foot note
(c) caption (d) stub

3. Name the Simplest measures of dispersion.
(a) Mode
(b) S.D
(c) Standard error
(d) Range

4. The tool which used to test the goodness of fit is _____
(a) SE (b) Chi square test
(c) Variance (d) Mean

5. Select one of the input device
(a) Monitor (b) Joystick
(c) Printer (d) Projector

6. Global system of interconnected network is _____
(a) internet (b) browsing
(c) computer (d) none

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the types of table.

Or

(b) Discuss the quantitative and qualitative variables.

12. (a) Elaborate the Co efficient of variation.

Or

(b) Write short note on Histogram.

13. (a) Comment on e-learning tools.

Or

(b) Write short note on CPU.

14. (a) Comment on pair wise sequence comparison.

Or

(b) Explain the applications of bioinformatics.

15. (a) Discuss the SWISS PDP viewer.

Or

(b) Write a note on Genbank.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss the sources of secondary data collection.

Or

- (b) Elaborate the Sampling methods.

17. (a) Calculate the Mean and standard deviation for the given data.

Size : 6 7 8 9 10 11 12

Frequency : 3 6 9 13 8 5 4

Or

- (b) Elaborate the characteristics of Chi square test.

18. (a) Discuss the various output devices.

Or

- (b) Elaborate the applications of MS power point.

19. (a) Discuss the multiple sequence alignment.

Or

- (b) Enumerate the scope of bioinformatics.

20. (a) Elaborate the SWISS PROT.

Or

- (b) Discuss the Data base retrieval tools.