

(6 pages)

Reg. No. :

Code No. : 30256 E Sub. Code : SMZO 63/
AMZO 63

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2023.

Sixth Semester

Zoology — Core

BIostatistics, Computer Application and
Bio Informatics

(For those who joined in July 2017–2020)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. This diagram is constructed based on the angle of a circle
- (a) pie-diagram (b) bar diagram
(c) histogram (d) line diagram

6. In computer which one of the following button should be pressed to appear the capital letter.
- (a) Caps lock (b) Return
(c) Alt (d) None
7. Protein Data Bank was created on
- (a) 1972 (b) 1975
(c) 2000 (d) 1990
8. The sequences used in bio informatics is
- (a) DNA sequences
(b) RNA sequences
(c) Protein sequences
(d) All
9. The _____ option allows us to get all entries in one database.
- (a) Together (b) Link
(c) Joint (d) Separate
10. This is a protein sequence database
- (a) CBI (b) IDRS
(c) SWISS-PROT (d) NCBI

Page 3 Code No. : 30256 E

2. The repeated occurrence of a number in a series is called
- (a) Mean
(b) Median
(c) Mode
(d) Standard deviation number
3. Co-efficient of range can be calculated by
- (a) $\frac{L+S}{L-S}$ (b) $\frac{L \times S}{L+S}$
(c) $\frac{L-S}{L+S}$ (d) $\frac{L+S}{L \div S}$
4. The study of significance of difference between two means are called
- (a) Student 't' test (b) Dispersion
(c) Correlation (d) Regression
5. Which one of the following is an output device
- (a) Touch screen (b) Keyboard
(c) Printer (d) Digital camera

Page 2 Code No. : 30256 E

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Compute a pie-diagram with self example.
- Or
- (b) Explain the different methods of collecting data.
12. (a) Calculate the standard deviation for the following data :
- Height of students : 60, 60, 61, 62, 63, 63, 63, 64, 64, 70
- Or
- (b) Describe the chi-square test with an example.
13. (a) Write a short notes on input devices.
- Or
- (b) Give a brief account on CPU.

Page 4 Code No. : 30256 E
[P.T.O.]

14. (a) Define bio-informatics. Explain briefly.

Or

(b) Give a brief account on biological sequence analysis.

15. (a) Write notes on application of bio-informatic tools.

Or

(b) Write short notes on FASTA.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Write about the methods of mean, median and mode.

Or

(b) Define tabulation. Explain the general rule for the construction of table.

17. (a) Write a detailed account of variance and range.

Or

Page 5 Code No. : 30256 E

(b) Write a detailed account on correlation co-efficient.

18. (a) Explain in detail about the application of MS word.

Or

(b) Write a detailed account of memory unit.

19. (a) Give an account on the scope and application of bioinformatics.

Or

(b) Explain in detail about the pair wise sequence comparison.

20. (a) Write an elaborate note on EMBL and SWISS PORT.

Or

(b) What is Pubmed? Evaluate the applications.

Page 6 Code No. : 30256 E