(6 pages)

Reg. No. :

Code No.: 7896

Sub. Code: PBOM 33

M.Sc (CBCS) DEGREE EXAMINATION, NOVEMBER 2019.

Third Semester

Botany - Core

COMPUTER APPLICATION AND BIOINFORMATICS

(For those who joined in July 2017 onwards)

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer:

- In a word document the fast way of inserting common words is
 - (a) Auto Save
- (b) Auto Correct
- (c) Auto Text
- (d) Auto Recover
- The feature of Microsoft Excel is
 - (a) calculation
- (b) graphing tools
- (c) pivot tables
- (d) all the above

- 3. The join the inernet, the computer has to be connected to a
 - (a) internet architecture board
 - (b) internet society
 - (c) internet service provider
 - (d) none of the mentioned
- 4. Which one of the following protocol is not used in internet?
 - (a) HTTP
- (b) DHCP
- (c) DNS
- (d) None of the mentioned
- 5. The term bioinformatics emerged in the year
 - (a) 1989
- (b) 1988
- (c) 1985
- (d) 1990
- 6. A human genome contains about
 - (a) 2 billion base pairs
 - (b) 3 billion base pairs
 - (c) 4 billion base pairs
 - (d) 5 billion base pairs

Page 2 Code No. : 7896

- Which of the following is a protein sequence database?
 - DDBJ
- EMBL
- Genbank
- PIR (d)
- The Genbank and SwissProt are the examples of 8.
 - Primary database
 - Secondary database
 - Composite database
 - None of these
- Which of the following tools is used to search 9. homology and similarity
 - BLAST
- RasMol
- PASS
- MMTK (d)
- The visualization of proteins, nucleic acids and small molecules is by the method
 - PHYLIP
- GOR
- PFAM (c)
- RasMol (d)

Code No.: 7896 Page 3

PART B \rightarrow (5 × 5 = 25 marks).

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 250 words.

Define computer? Explain its applications. 11.

Or

- Outline the classification of computers.
- What is Search Engine? 12. (a)

Or

- Point out the application of internet.
- Describe Bioinformatics. 13. (a)

Or

- Explain the human genome project.
- Briefly explain the GenBank. 14. (a)

Or

- Describe the protein sequence database. (b)
- Explain BLAST. 15. (a)

Or

on molecular visualization Write notes software.

> Code No.: 7896 Page 4

[P.T.O.]

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words.

16. (a) Write an essay on characteristics of computers?

Or

- (b) Give a detailed note on MS Excel.
- 17. (a) Describe the Internet Browsers.

Or

- (b) Write an elaborate note on Worldwide web.
- 18. (a) Give an account of genomics and proteomics.

Or

- (b) Narrate the medically relevant genes.
- 19. (a) Explain the SwissProt.

Or

(b) Describe the TrEMBL.

Page 5 Code No. : 7896

20. (a) What is FASTA? Explain it.

Or

(b) Describe the method of pairwise and multiple sequence alignment.

Page 6

Code No.: 7896