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Code No.: 5896 Sub. Code: PBOM 33

M.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2020.

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:

- 1. ——— are the system software to facilitate editing of text and data
 - (a) MS word
 - (b) Editors
 - (c) Powerpoint
 - (d) MS publisher

- 2. PARAM is an example of
 - (a) Super Computer
 - (b) Personal computer
 - (c) Laptop
 - (d) PDA
- 3. IP stands for
 - (a) Internet protocol
 - (b) Initial protocol
 - (c) Immediateprotocol
 - (d) Indeterminate protocol
- 4. Which of the following is not a search engines for browsing
 - (a) Mozilla
 - (b) Google
 - (c) Linux
 - (d) Safari
- 5. A compound that has desirable properties to become a drug is called
 - (a) Lead
 - (b) Find
 - (c) Fit drug
 - (d) Fit compound

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| 6. | Proteomics research can be categorized as | | | | | | | |
|----|--|---------------------------------------|------------|------|--------------|--|--|--|
| | (a) | Structural proteomics | proteomics | and | functional | | | |
| | (b) | Structural, proteomics | functional | and | comparative | | | |
| | (c) | Functional and comparative proteomics | | | | | | |
| | (d) | None of these | | | | | | |
| 7. | Information of all known nucleotide and protein sequence are available | | | | | | | |
| | (a) | EMBL | | | | | | |
| | (b) | DDBJ | | | | | | |
| | (c) | NCBI Gene Bank | | | | | | |
| | (d) | All of these | | | | | | |
| 8. | EBI maintains | | | | | | | |
| | (a) | NCBI | | | | | | |
| | (b) | PUBMED | | | | | | |
| | (c) | GENBANK | | | | | | |
| | (d) | SWISS- PROT | | | | | | |
| 9. | The initiation of FASTA format has ———symbol | | | | | | | |
| | (a) | > | (b) | < | | | | |
| | (c) | % | (d) | @ | | | | |
| | | | Page 3 | Code | e No. : 5896 | | | |

| 10. | The tool used to find the translated nucleotide to protein | | | | | | |
|--|--|---------|-----|---------|--|--|--|
| | (a) | tblastn | (b) | blast x | | | |
| | (c) | nblast | (d) | yblast | | | |
| PART B — $(5 \times 5 = 25 \text{ marks})$ | | | | | | | |

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

Each answer should not exceed 250 words.

11. (a) Write short notes on various generations of computers.

Or

- (b) Write briefly about power point applications. Add notes on its applications.
- 12. (a) Write short notes on Browsers.

Or

- (b) Give brief account on various features of email in the field of research.
- 13. (a) Discuss the scope of Bioinformatics.

Or

(b) Write briefly about the application of Genomics.

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14. (a) Comment on Genbank and its importance.

Or

- (b) Write briefly about structural database PDB.
- 15. (a) Write short notes on Multiple sequence alignment.

Or

(b) Give an account on PASS software in the field lifescience

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 various input and output devices of computers in handling the various databases efficiently.

Or

- (b) Give detailed account on MS excel and its features.
- 17. (a) Explain the procedure of publishing a paper in e-journal with a suitable example.

Or

(b) Write an essay on internet and its applications.

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18. (a) Explain Human Genome Project in detail.

Or

- (b) Write an essay on proteomics and its role in human welfare.
- 19. (a) Comment on Biological databases in detail.

Or

- (b) Explain the literature databases in detail.
- 20. (a) Explain the pairwise and multiple sequence alignment and its application in life sciences.

Or

(b) Write an essay on Molecular visualization tools.

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