

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 09

B.Sc - Honours (Microbiology) (Sem.-5)
COMPUTER SCIENCE AND BIOINFORMATICS

Subject Code : BSMB507-20

M.Code : 92513

Date of Examination : 19-12-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A

1. Write briefly :

- a) Discuss the CPU functions.
- b) Define DNA.
- c) Define BLAST
- d) What do you mean by data submission tools?
- e) What is FASTA?
- f) Define file formats.
- g) Discuss the input/output devices.
- h) What are the various storages devices?
- i) Enlist the application of computer sciences in bioinformatics.
- j) Highlight the functional units and their interrelation.

SECTION-B

2. Mention the basic computer organization.
3. Elaborate on the phylogenetic trees constitution for microbial diversity.
4. Describe about database similarity search.
5. Mention the multiple sequence alignment for studying microbial diversity.
6. Discuss the various fundamentals of computers.

SECTION-C

7. Discuss in detail about stored programs and applications of database similarity search.
8. Mention in detail about limitations of bio-information's and protein sequence database.
9. What do you know about pair wise sequence alignments and structure databases.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.