

SUPPLEMENTARY
MASTER OF PHARMACY (M. PHARM.) (CBCS-2019 COURSE)
M.Pharm. Sem-II PHARMACEUTICAL BIOTECHNOLOGY :SUMMER- 2022
SUBJECT : BIOINFORMATICS & COMPUTATIONAL TECHNOLOGY

Day : Monday

Time : 10:00 AM-01:00 PM

Date : 19-09-2022

S-20783-2022

Max. Marks : 75

N.B.:

- 1) **Q.No. 1 and Q.No. 5 are COMPULSORY.** Out of the remaining questions attempt any **TWO** questions from **Section-I** and **Section-II** each.
- 2) Answers to both Section should be written in **SAME** answer book
- 3) Figures to the right indicate **FULL** marks
- 4) Draw the neat labelled diagram wherever necessary.

SECTION – I

- Q.1** Define and describe the data mining. Add a note on Boolean search. **(08)**
- Q.2** Explain BLAST algorithm in detail. Enlist different types of BLAST. **(10)**
- Q.3** Enlist and explain different literature databases. **(10)**
- Q.4** Write short notes on **ANY TWO** of the following: **(10)**
- a) CLUSTAL X
 - b) Cloud computing
 - c) Rooted and Un-rooted phylogenetic tree

SECTION – II

- Q.5** Discuss gene duplication events and its importance in generation of gene families **(7)**
- Q.6** Differentiate F+ and Hfr conditions. Give their significance in lateral gene transfer **(10)**
- Q.7** What is DNA microarray? How would you use this technique for lead discovery **(10)**
- Q.8** Write short notes on **ANY TWO** of the following: **(10)**
- a) Validation in homology modelling
 - b) Transduction
 - c) Library of ligands

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