

MASTER OF SCIENCE (BIOINFORMATICS) (CBCS-2019 COURSE)
M. Sc. (Bioinformatics) Sem-III : WINTER :- 2021
SUBJECT: BIODIVERSITY INFORMATICS & MOLECULAR
PHYLOGENETICS

Day : Monday
Date 7/2/2022

W-21183-2021

Time : 02:00 PM-03:30 PM
Max. Marks: 30

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the **RIGHT** indicate **FULL** marks.
 - 3) Answer to both the sections should be written in **SAME** answer book.
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SECTION – I

Q.1 Give special features of : (**ANY FIVE**) : **(05)**

- a) Species 200
- b) Tree of Life
- c) Urban Biodiversity
- d) Ecosystem
- e) Taxonomic Methods
- f) Nature of Biodiversity Data

Q.2 Answer the following (**ANY TWO**) : **(10)**

- a) Explain the diversity of life.
- b) What are national, regional and global diversity information systems? Explain with examples.
- c) Describe any two biodiversity and ecosystem based databases.

SECTION – II

Q.3 Define (**ANY FIVE**) **(05)**

- a) UPGFMA
- b) Bootstrap
- c) N-J method
- d) Jackknife decay
- e) GBIF
- f) ATCC

Q.4 Answer the following : (**ANY TWO**) : **(10)**

- a) Explain probabilistic models of evolution.
- b) Describe the various types of trees.
- c) How do you calculate tree to tree distance?
