

**M. Sc. Bioinformatics Sem.-III (2013 Course) (Choice Based Credit
Systems) : SUMMER - 2019**
SUBJECT: ELECTIVE-IV: a) RECENT TRENDS IN BIOINFORMATICS

Day: Tuesday
Date: 02/04/2019

S-2019-1472

Time: 02.00 PM TO 05.00 PM
Max Marks: 60

N.B.:

- 1) **Q. No.1 and Q. No.5 are COMPULSORY.** Out of the remaining, attempt **ANY TWO** from each section.
- 2) Answers should be written in **SAME** answer book.
- 3) Figures to the right indicate **FULL** marks.
- 4) Draw neat labeled diagram **WHENEVER** necessary.

SECTION-I

- Q.1** Enlist Five Commands of: (10)
a) Linux b) SQL c) Excel d) DOS e) NGS (For any tool)
- Q.2** Answer the following: (10)
a) Explain bioinformatics Matlab version.
b) Write silent features of CERF.
- Q.3** Write short notes on: (10)
a) Explain the ChIp- Seq data analysis in Galaxy.
b) Explain the RNA- Seq data analysis in Galaxy.
- Q.4** Briefly explain different genome browsers. How circos plots helps in visualizing genes. (10)

OR

Describe gene list enrichment analysis. Explain ENSEMBL's working principal.

SECTION-II

- Q.5** Define: (10)
a) IGV b) UCSC c) Cool BaRc d) Big Data e) Cool BARC
- Q.6** Answer the following: (10)
a) Enlist the R commands for data analysis.
b) Explain Array express functioning principal.
- Q.7** Write Short notes on: (10)
i) Cytoscape ii) BIOBASE
- Q.8** Explain in detail MEGA. Explain the silent features of this software. Explain its applications. (10)

OR

Give an account of TRANSFAC & GeneGo

* * * * *