

**M. Sc. Bioinformatics Sem.-III (2013 Course) (Choice Based Credit
Systems) : SUMMER - 2019**
SUBJECT: COMMERCIAL BIOINFORMATICS

Day: Tuesday
Date: 02/04/2019

S-2019-1473

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** Define: (10)
- a) Commercial Bioinformatics
 - b) HTS
 - c) Microarray
 - d) IPR
 - e) Pharmacogenomics
- Q.2** Answer **ANY TWO** of the following: (10)
- a) What is a role of Phrap and Phread in genome assembly?
 - b) Write a short note on Proteomics.
 - c) How genomics plays an important role in medicine?
- Q.3** Write short notes on **ANY TWO** of the following: (10)
- a) Drug Discovery
 - b) Disease Monitoring
 - c) Pharmacokinetics
- Q.4** Explain the role of IPR in bioinformatics. Enlist suitable examples. (10)
- OR
- Write in detail on bioinformatics patents.

SECTION II

- Q.5** Explain why: (10)
- a) This branch of bioinformatics is called as systems biology.
 - b) Agro-bioinformatics is a need of an hour.
 - c) Metagenomics is opening unknown world in front of scientists.
 - d) NGS technologies should be cheaper.
 - e) Big data represents by 'V'.
- Q.6** Explain the basic principal of working of **ANY TWO** of following companies: (10)
- a) Accelrys
 - b) CLCbio
 - c) Strand Life Sciences
- Q.7** Write short notes on **ANY TWO** of the following: (10)
- a) Neuro-bioinformatics
 - b) Epigenetics
 - c) Glycobiology
- Q.8** Enlist and explain NGS principles based company profiles. (10)
- OR
- Describe C-DAC bioinformatics facilities in brief.