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

Day: Tuesday	**S-2019-1473**	Time: 02.00 PM TO 05.00 PM
Date: 02/04/2019		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   (10)
   companies:
   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.

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