



(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 154502

Roll No.

--	--	--	--	--	--	--	--	--	--

B. Tech.

(SEM. V) (ODD SEM.) THEORY

EXAMINATION, 2014-15

BIOINFORMATICS – II

Time : 2 Hours]

[Total Marks : 50

Note : Attempt all questions.

- 1 Write short notes on any two : 7×2=14
 - a) Computer aided Drug designing
 - b) Biological Networks
 - c) Microarray technique for gene expression characterization

- 2 Attempt any two parts of the following : 6×2=12
 - a) Explain Chow-Fasman and GOR algorithm for protein secondary structure prediction.
 - b) What is machine learning? Explain different types of learning algorithm with example.
 - c) In detail explain Artificial neural network.

- 3 Attempt any two parts of the following : 6×2=12
 - a) Explain Genetic algorithm in detail. Write down few application of this algorithm.

- b) Explain Support vector machine and mention its application.
- c) What is cross validation? Explain different methods available for it.

4 Attempt any two parts of the following : **6×2=12**

- a) What is computer simulation? Write short note on differential equation simulator.
- b) Explain the steps involved in homology modeling in detail.
- c) Write short note on Information retrieval systems.