

**CLASS: M.Sc. BIOTECHNOLOGY**

**15A/ 231**

**St. JOSEPH'S COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI – 620 002**

**SEMESTER EXAMINATIONS – APRIL 2015**

**TIME: 2 Hrs. 20 Mins.**

**MAXIMUM MARKS: 70**

<b>SEM</b>	<b>SET</b>	<b>PAPER CODE</b>	<b>TITLE OF THE PAPER</b>
<b>II</b>	<b>2014</b>	<b>14PBT2109</b>	<b>BASIC BIOINFORMATICS</b>

**SECTION – B**

**Answer all the questions:**

**5 x 5 = 25**

31. a. Write short notes on history of Bioinformatics.

**OR**

b. Give a short account on scope and research areas of Bioinformatics.

32. a. Distinguish between primary and secondary databases.

**OR**

b. Write short notes on protein structure classification databases.

33. a. Compare and contrast the features of BANKIT and SEQUIN.

**OR**

b. Give a short account on Molecular viewers.

34. a. Give an overview of BLAST tools available at NCBI.

**OR**

b. Write down the basic concepts of sequence alignment.

35. a. List out the applications of Metabolomics.

**OR**

b. Write short notes on System biology.

## SECTION – C

**Answer any THREE questions:**

**3 x 15 = 45**

36. Describe the classification scheme of Biological databases in detail.
37. Discuss the different types of Databases of NCBI in detail.
38. Explain molecular phylogeny and methods of analysis to examine phylogentic relationships.
39. Describe the computational methods of gene prediction in detail.
40. Explain the experimental methods adopted, challenges and emerging trends in proteomics.

\*\*\*\*\*