R09

Code No: D0307

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD M.Tech II - Semester Examinations March/April 2011 BIOINFORMATICS (BIOTECHNOLOGY)

Time: 3hours Max.Marks:60

Answer any five questions All questions carry equal marks

1. Describe in brief about KEGG and state how it is useful in research. [12] 2. What are the various parameters used in Insilco gene finding approaches? Name two software used for gene finding. [12]3. How SNP plays an important role in identifying disease gene? Explain. [12] 4. What are the heuristic methods employed for database searching? Explain Gapped Blast. What are the applications of such database searches? [12] 5. Define multiple sequence alignment. Describe in detail about methods employed in multiple sequence alignment. [12] 6. Describe the different levels of protein structure and discuss about protein-protein interaction. [12] 7. Explain the concept of conformational energy calculations and molecular dynamics. [12] 8. Write short notes on the following: a. Quantitative Structure-Activity Relationships (QSAR). b. Computer-assisted drug design. [12]
