

Dr Narender

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
T-2 EXAMINATION, Oct 2019
Ph.D. I Semester

COURSE CODE: 13M11BT112
COURSE NAME: Advanced Bioinformatics

MAX MARKS: 25
MAX. TIME: 1.5 Hr.

*Note: All questions are compulsory. Attempt all questions of a particular section at one place.
Answer each question to the point.*

1. How do you select template for homology modelling? (3 marks) (CO1, CO2)
2. How do we perform loop modelling (Explain two methods)? (3 marks) (CO1, CO2)
3. Describe three different approaches used for homology modelling (3 marks) (CO1, CO2)
4. What is dot matrix plot? Explain its advantage and limitations. (3 marks) (CO1, CO2)
5. Write a short note on the importance of sequence identity, sequence similarity and e-value in sequence alignment. (6 marks) (CO1, CO2)
6. What is a vector in R language? Give an example of vector. (2 marks) (CO3, CO4)
7. What are different data types in R language. (3 marks) (CO3, CO4)
8. How is R useful to biologists. Write a short note. (2 marks) (CO3, CO4)