JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST-1 EXAMINATION - Summer Semester June-2018
B.Tech (Bioinformatics)

Course Code: 16B11BI611   **MAX. MARKS: 50**

Course Name: Computer Aided Drug Design

COURSE CREDITS: 04   **MAX. TIME: 2 HR**

Note: All questions are compulsory. Carrying of mobile phone during examination will be treated as case of unfair means.

Q.1. What are various stages of drug discovery process? Explain with proper time lines.   [5]

Q.2. Define drug. What are three basic approaches for drug design? Explain with the help of a flow chart.

[5]

Q.3. Explain QSAR method. Discuss QSAR models and descriptors with suitable example of each. [5]

Q.4. How ADME property prediction can be performed. Explain its application in the process of drug

design.   [5]

Q.5. What are molecular descriptors? Discuss any specific method for the analysis of molecular

descriptors.   [5]

Q.6. What are various phases of clinical trials? Explain each in detail.   [5]

Q.7. Define chemoinformatics. Discuss chemoinformatics protocols involved in the drug discovery process.

[5]

Q.8. Discuss following with an example of each:

(i) Pharmacophore   (ii) SMILES Notations   (iii) Failed (withdrawn from market)drugs through side

effects   (iv) Docking   (v) Tools for CADD   [3x5=15]