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Roll No.

B.Tech. IBIOTECHNOLOGYI

MID SEMESTER EXAMINATION

March-2019

BT404 ADVANCES IN COMPUTATIONAL BIOLOGY

Time: 1:30 Hours

VIII SEMESTER

Max. Marks: 20

Note: Answer all questions.

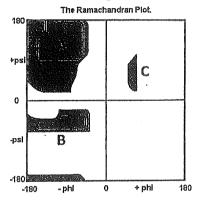
All questions carry equal marks.

Assume suitable missing data, if any.

Q1. [a] Describe different experimental approaches for protein structure determination.

[2]

- [b] Name a protein 3D structural database. Briefly describe the contents of [2] PDB file data format.
- [c] Label the below diagram



[3]

[1]

- Q2. [a] What are the applications of pharmacogenomics studies?
 - [b] How can patients be categorised according to their drug metabolising ability? [2]
 - [c] In what way above categorization can be of use in predictive prescribing? [4]

P.T.O.

Q3. [a] Write some applications of SNP studies. Also mention two widely used SNP databases. [3]

[b] Explain the effects of mutations in coding and noncoding region of eukaryotic genome.

[3]

END