

SARDAR PATEL UNIVERSITY

M.Sc. (BIOINFORMATICS)

SEMESTER - III External Examination

PS03CMBI02: Computational Structural Biology

Wednesday, 5th December 2012

Time: 2:30p.m. to 05:30 p.m.

Max Marks: 70

Q1. Choose the most appropriate option for each question.

[8]

- a. _____ is induced electrical interactions which contribute significantly to conformational stability in the interior of the protein.
- A) Hydrophilic interactions B) Covalent interactions
C) Van der Waals interactions D) Hydrophobic interactions
E) None of above.
- b. The existing protein structures have been exhaustively compared to each other by DALI and the results are organized into the _____ database.
- A) SCOP B) SARF
C) FSSP D) MMDB
E) None of Above
- c. phi (ϕ) bond corresponds to the bond between.
- A) Alpha carbon & amide nitrogen B) Alpha carbon & alpha carbon
C) Carbonyl carbon & amide nitrogen D) Alpha carbon & carbonyl carbon
E) None of above.
- d. _____ may or may not be an indicator of an evolutionary relationship.
- A) Sequence similarity B) Genome similarity
C) Structural similarity D) All of Above
E) None of Above
- e. _____ are structural analogs that bind to a receptor and mimic the effects of its natural ligand.
- A) Agonists B) Antagonists
C) Pharmacophore D) Hit molecule
E) None of Above

