

(13)

SEAT No. _____

No. of Printed Pages : 02

SARDAR PATEL UNIVERSITY EXAMINATION

DATE -04/04/19

DAY- Thursday

TIME 10:00 TO 1:00 pm

Course- US06CBNF06

SUBJECT: BIOINFORMATICS

CLASS- T.Y.B.Sc VI Sem

TITLE-Structural Bioinformatics & RDBMS-II

TOTAL MARKS: 70

Q1- Answer the following Multiple Choice Questions:

10]

- 1] Profile is prepared using PSI-BLAST in
 - a) Chou Fasman
 - b) GOR
 - c) PSIPRED
 - d) PHD
- 2] Coordinates for known protein structures are housed in?
 - a) CATH
 - b) SCOP
 - c) PDBsum
 - d) PDB
- 3] Which server is used to compare three-dimensional protein structures?
 - a) DALI
 - b) FSSP
 - c) SCOP
 - d) CATH
- 4] Which one of the following tools can be used for both modeling the protein and structure visualization?
 - a) Swiss-PDB Viewer
 - b) QMol.
 - c) RasMol.
 - d) ChemSketch.
- 5] The window size in GOR method is
 - a) 15
 - b) 17
 - c) 13
 - d) none
- 6] The address field of an index is called _____.
 - a) Row id
 - b) column id
 - c) View
 - d) Index
- 7] The statement containing subquery is called _____ statement.
 - a) Parent
 - b) Primary
 - c) child
 - d) main
- 8] The concept of joining multiple tables is called _____.
 - a) Cross joins
 - b) Outer join
 - c) Edit join
 - d) Inner join
- 9] To reduce redundant data to the minimum possible and object is create called a _____.
 - a) Views
 - b) Synonym
 - c) Sequences
 - d) Indexes
- 10] The _____ function returns an integer value corresponding to the UserID of the user currently logged in.
 - a) ROWID
 - b) USER
 - c) UID
 - d) ROWNUM

(1)

(P.T-0)

Q2—Answer the Short Questions: (attempt any TEN)

[20]

- 1] Why Ramachandran plot is important.
 - 2] Give abbreviation of GOR, CATH, SCOP, and PDB.
 - 3] Explain protein and concept of protein secondary structure prediction
 - 4] Differentiate between Chou fasman and GOR method.
 - 5] Give the important features of PSI-PRED.
 - 6] Define transmembrane and its importance.
 - 7] What are unique indexes?
 - 8] What is a privilege? List the object privileges.
 - 9] Explain the use of rollback.
 - 10] Explain self-join in brief with example.
 - 11] List all Character functions & Number Functions available in oracle.
 - 12] List different privileges that can be granted to a user.
-
- Q3] Describe in detail about ANN algorithm and its utility in bioinformatics. [10]
OR
- Q3] Discuss any two methods for protein secondary structure prediction. [10]
- Q4] Write in detail about the method and importance of homology modeling. [10]
OR
- Q4] Discuss the concept and method of any tool for protein structure comparison. [10]
- Q5] What is index? How various types of indexes are created? Explain with syntax with example. [10]
OR
- Q5] i) What is use of sequences? Explain creating & dropping it with example. [05]
ii) What is view? Why it is created, explain it syntax & example [05]
- Q6] i) Explain INNER join and OUTER join in detail. [05]
ii) List all Aggregate functions available in oracle and explain any one of them with appropriate syntax and example. [05]
OR
- Q6] List different types of index files and explain how to create index files with example. [10]

—x—
(2)