Post graduate Diploma in Bio-informatics
Annual Examination- 2010
Paper No. : PBID- 103
Bio-informatics Databases and their Management

Time: Three Hours **Maximum marks: 70**

Section-I
Answer all objective type questions (10×1 = 10)

1) The schema describes the ..... of the database.
2) Cursor can be defined as .....
3) Partial dependency should be particularly removed in ..... normal form.
4) ..... is a program that manages exceptions.
5) A trigger is always invoked before or after ..... operations.
6) ..... is required property for decomposition, as a process of normalization.
7) ..... is a sub program which always return value.
8) UPDATE command is used to .....
9) DDL (data definition language) is used to ..... .
10) HOBACGEN stands for .....
11) DCL (data control language) is used ..... .
12) User must specify size for a ..... value.
13) HuGE is ..... databases.
14) PL/ SQL stands for .....
15) VIEW is a ..... table.
16) ..... attribute is used to copy the structure of a field from table.
17) ..... Command is used to display the output of program.
18) Alter command is used to .....
19) Join operation is used to .....
20) Super key is .....

Section II
Answer any five questions (5×6 = 30)

1) What is the difference between table and view? Discuss views of the database.

2) Discuss the application of DBMS software in Bio-informatics.

3) What are Microbial databases?

4) Define following keys:
   - Primary key
   - Candidate key

Foreign key

structural databases are different from sequence databases.

will you write a program in PL/SQL? Give one example to support your answer.

t is ICTV? What does it do?

fly describe basic SQL commands with suitable examples?

Section III

Answer any three questions (3×10=30)

llustrate database management system in detail with detailed expression on its component.

Explain Relational Algebra in terms of set and relational operators. Use one example to support your answer.

) What are the structural, Genomic, Physicochemical and Replicative properties of Viruses used in Taxonomy?

1) Consider the relation R = {A,B,C,D,E,F,G,H,I,J} and the set of functional dependencies F = {AB→ C, A→ DE, B→ F, F→GH, D→ I J}. What is the key for R? Decompose R into 2NF then 3NF relations.

5) What are the structural databases? Which types of databases are included in thi database?