5. (a) Describe the concept of data integrity. 6

(b) What is the significance of savepoint ? Explain. 6

OR

(p) Describe any two control structures in PL/SQL. 6

(q) What are unions ? Explain. 6

6. (a) Explain various privileges associated with a user. 4

(b) What is Role ? Describe the need of Roles. 4

(c) Write the method for giving privileges to an user. 4

OR

(p) How can a user pass privileges to other ? Explain. 4

(q) Write the features of SQL *forms. 4

(r) Write the procedure for removing the privileges. 4

7. (a) Write the benefits of PERL. 4

(b) Explain use of arrays in PERL. 4

(c) What is a subroutine ? Explain with an example. 4

OR

(p) Write the steps for installing PERL. 4

(q) What are command line arguments ? Explain. 4

(r) How debugging is done in Perl Code ? Explain. 4

AQ–764

B.Sc. Part–III (Semester–VI) Examination

6S : BIOINFORMATICS

(Advanced Bio-Computing)

Time—Three Hours] [Maximum Marks—80

Note :— (1) **ALL** questions are compulsory.
(2) Draw diagrams wherever necessary.

1. (a) Fill in the blanks :

(i) Using _____ a class can acquire properties of another class.

(ii) The query _____ is used to change the structure of a table.

(iii) The _____ statement completes a database transaction.

(iv) _____ is the member function of class which is invoked automatically when its object is created. 2

(b) Choose the correct alternative :

(i) Which of the following is not a feature of object oriented programming paradigm ?

(a) Inheritance (b) Polymorphism

(c) Static binding (d) Data encapsulation

(ii) DML stands for _____.

(a) Data Management Language

(b) Data Manipulation Language

(c) Data Modification Language

(d) Data Manipulation Library

(iii) The member function which is used to free the data members of the same class is _____.

(a) Destructor (b) Destroyer

(c) Release (d) Free

(iv) PERL stands for _____.

(a) Practical Experiment and Report Language

(b) Practical Extraction and Report Language

(c) Practical Experiment and Result Language

(d) Practical Extraction and Result Language 2

(c) Define the following :

(i) Polymorphism

(ii) ALTER statement

(iii) Function prototype

(iv) SQL data types. 4

2. (a) Explain constants in C++. 4

(b) Describe the logical operators in C++. 4

(c) List the characteristics of inline function. 4

OR

(p) What is dynamic binding ? Explain. 4

(q) Write a recursive function "fact ( )" which finds the factorial of a given number. 4

(r) Describe the "switch" statement in C++. 4

3. (a) Describe the different ways for defining a member function. 4

(b) Explain the access specifiers in a class. 4

(c) Define a class with two data members and two member functions to read and display the contents of data members. 4

OR

(p) Explain multiple inheritance with suitable example. 4

(q) What is operator function ? Explain. 4

(r) What is default constructor ? Explain. 4

4. (a) Describe the hierarchical database model. 6

(b) Explain any two DDL commands with suitable examples. 6

OR

(p) What is data dictionary ? Explain. 6

(q) Explain the BCNF for normalizing a database. 6