AU–180

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 :- 2

(i) _____ command is used to declare a record.

(ii) A row can be added in a database by using SQL's _____ command.

(iii) _____ attributes returns Null value.

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

(b) Choose the correct alternative :— 2

(i) Which of the following term is used for a function defined inside a class ?

(a) member variable (b) member function

(c) class function (d) classic function

(ii) COUT is an _____.

(a) Operator (b) Function

(c) Object (d) Macro

(iii) PERL is a/an _____.

(a) A type of interactive web page (b) A programming language

(c) An application program (d) A relational database

(iv) The wrapping up of data and functions into a single unit is called :

(a) Inheritance (b) Polymorphism

(c) Encapsulation (d) Overloading

(c) Define the following :- 4

(i) Domain

(ii) Class

(iii) Abstraction

(iv) Data definition language.

2 (a) Explain rules for creating Inline Function. 4

(b) Explain how constants can be defined in C++. 4

(c) What are user defined data types ? Explain. 4

OR

(a) What is OOP's ? State and explain structure and features of OOP. 4

(b) Which are the rules for overloading a function ? Explain. 4

(c) Explain static binding with example. 4

3. (a) What do you mean by operator overloading ? Explain. 4

(b) Explain with example how class member is accessed. 4

(c) Differentiate between constructor and Destructor. 4

OR

(a) Explain access specifiers in a class. 4

(b) Explain Inheritance with example. 4

(c) Explain copy constructor with example. 4

4. (a) What is view ? Explain how it differs from table. 4

(b) Explain first normal form with example. 4

(c) Explain different types of SQL statements. 4

OR

(a) Explain various levels in Database system with example. 4

(b) Explain BNCF with example. 4

(c) Explain Domain and Attribute with example. 4

5. (a) Explain Implicit and Explicit cursor with example. 4

(b) What is Join ? Explain different types of Joins ? 4

(c) Explain character functions with example. 4

OR

(a) State and explain constraints with example. 4

(b) What is different between a Rollback and Commit command ? 4

(c) Explain classify and cursor attributes with example. 4

6. (a) What are privileges ? Elaborate on system privilege, its role and needs. 12

OR

(b) State detail account on GRANT privileges. Add explanation on SQL reports with example. 12

7. (a) Explain working environment of Perl. What are the advantages of 'C' over Perl and explain how data can be passed to subroutine in Perl. 12

OR

(b) Explain which feature of Perl provides code reusability. Explain scalar data and scalar variable in Perl. And discuss the benefits of Perl programming in using it in web based applications. 12

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