## B.A./B.Sc. (General) 5th Semester

## (2123)

## INFORMATION TECHNOLOGY

### Paper—A Data Base System & VB.NET

**Time Allowed : Three Hours]**       **[Maximum Marks : 65**

**Note :**—Attempt **five** questions in all, by selecting **one** question from each Unit. Entire Question No. **IX** is compulsory.

### UNIT—I

I. Explain the following in VB.NET :

  (a) Solution Explorer

  (b) Tool Box

  (c) Modules.                                     3,5,5

II. (a) Define Sub-Procedures. Write code to swap two numbers using Sub-Procedures.

  (b) What is Recursion ? Write code to calculate sum of N terms of Fibonacci Series.               7,6

### UNIT–II

III. (a) How are Arrays declared and accessed in VB.NET ? Give suitable examples.

  (b) How are Array elements passed to Procedures in VB.NET ? Write a procedure which sorts elements of an Array.                                 7,6

IV. Explain the following objects of ADO.NET in VB.NET :

    (a) Connection and Command

    (b) Data Adapter and Data Set

    (c) Command and Data Reader.              3,5,5

## UNIT–III

V. Explain the following in SQL :

    (a) Data Types

    (b) Cube Operation

    (c) Rollup Operation.              3,5,5

VI. (a) How are Null Values handled in SQL ?

    (b) What is Pattern Matching ? Explain with examples.

    (c) Describe the use of Set operators in SQL queries with suitable examples.              3,5,5

## UNIT–IV

VII. (a) How is a Table created from another Table ? Give syntax and example.

    (b) Explain the use of Privileges in managing Database Security.

    (c) Explain any two Conditional Controls used in PL/SQL.              3,5,5

VIII. (a) Explain Operator Precedence in PL/SQL.

    (b) Explain the use of Composite Datatypes in PL/SQL.

    (c) Define a Cursor. Explain the use of Implicit Cursor with examples.              3,5,5

IX. Write short answers :

(1) How are Logical Operators used in VB.NET ?

(2) Explain the use of items property of List Box.

(3) How does 'for each' loop work ?

(4) How can a column be added to a Table Structure ?

(5) What is the importance of using Sequence ?

(6) Explain the use of Unique Key constraint.

(7) Describe the use of Commit statement.                6×2+1