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

1128

INFORMATION TECHNOLOGY

Paper—A : Data Base System and VB.Net

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

Note :— Candidate is required to attempt **five** questions in all including question no. **1** (which is compulsory) and attempt remaining **four** questions by selecting **one** question from each unit.

COMPULSORY QUESTION

I.   (a)   Write the various features and applications of VB.Net.

$2\frac{1}{2}$

(b)   What are the various approaches for data management ?

$2\frac{1}{2}$

(c)   Differentiate between Menu Bar and Tool Bar. $2\frac{1}{2}$

(d)   Write a single statement that concatenates the words 'Good' and 'Morning' and assign it in a variable named greeting using PL/SQL. $2\frac{1}{2}$

(e)   What is the purpose of % type data type in SQL ? Explain with example.   3

II. (a) Discuss the various conditional operators available in VB.Net. 6½

(b) Discuss the various elements of user interface in VB forms. 6½

III. (a) What do you understand by passing arguments ? What are the various ways of passing arguments ? Explain each with example. 6½

(b) What is recursion and how is it useful in programming ? Write a recursive program to demonstrate recursion. 6½

UNIT—II

IV. (a) What is a string ? How strings are different from array ? Discuss the various string manipulation functions. 6½

(b) Write a program to implement insertion sort. 6½

V. Create an application using which we can insert and delete information from a database using SQL statements. 13

UNIT—III

VI. (a) What is DBMS and why is it required ? What are its various types ? Discuss the RDBMS for Railway Management. 6½

(b) What is SQL ? What are the various functions in SQL with example ? 6½

VII. (a) Write and explain the various character functions available in SQL with example. 6½

(b) Differentiate between inner join and outer join with example. 6½

UNIT—IV

VIII. Write a PL/SQL code for exception handling. 13

IX. (a) What are cursors and why are they used ? Explain with example. 6½

(b) Differentiate between following :

- Procedural and non-procedural DML.

- Inline views and materialized views. 6½