(i) Printed Pages : 4]   Roll No. ....

(ii) Questions   : 9]   Sub. Code : | 0 | 4 | 8 | 0 |

Exam. Code : | 0 | 0 | 0 | 5 |

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

1127

INFORMATIONAL TECHNOLOGY
(Data Base System and VB.NET)
Paper : A

Time : 3 Hours]   **[Max. 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

1. (a) Write the various features and applications of VB.net.   2.5

   (b) What is MDI form and what are its uses ?   2.5

NA–96   (1)   Turn Over

(c) Write the steps to be followed to add any object from the tool box to any application. 2.5

(d) Write a single statement that concatenates the words 'Hello' and 'World' and assign it in a variable named greeting using PL/SQL. 2.5

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

Unit–I

2. (a) Discuss the various relational operators available in VB.Net. 6.5

(b) Discuss the various elements of user interface in VB forms. 6.5

3. (a) Differentiate between pass by value vs. pass by reference. Explain with example. 6.5

(b) What is recursion ? Write a program to find factorial of a number using recursion. 6.5

NA–96 (2)

Unit–II

4. (a) What is string ? Discuss the various string manipulation functions.

   (b) Write a program to implement bubble sort.   6.5

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

Unit–III

6. (a) What are the various approaches for data management ? How DBMS is better than the other data management approaches ?   6.5

   (b) Discuss the *twelve* Rules (Codd's Rule) for RDBMS.   6.5

7. (a) Write and explain the various arithmetic functions available in SQL with example.   6.5

   (b) What are joins ? How data can be retrieved from multiple table using joins ? Give example.   6.5

NA–96   (3)   Turn Over

Unit–IV

8. Write a PL/SQL code to find the sum of digits of a number.   13

9. (a) Explain how each of the following mechanisms contribute to providing security for database :

     (i) Authorization

     (ii) Backup and Recovery

     (iii) Sequences   6.5

   (b) What are views and why are they needed ? How they help to enhance the database security ? Justify your answer.   6.5