AT–386

B.Sc. Part—III (Semester—V) Examination

COMPUTER SCIENCE

(RDBMS and Visual Basic)

Time : Three Hours] [Maximum Marks : 80

N.B. :— (1) All questions are compulsory.

(2) Question No. **1** carries **8** marks and all other questions carry **12** marks each.

(3) Assume suitable data wherever necessary.

1. (a) Fill in the blanks :

(i) The values for an attribute or a column are drawn from a set of values known as _____.

(ii) A _____ database model is based on tree structure.

(iii) _____ is the only tool in a toolbox which is not a control.

(iv) _____ property of command button is used to activate it by ENTER key during runtime. 2

(b) Choose the correct alternative :

(i) Which of the following is not a SQL component ?

(a) DDL (b) DSL

(c) DML (d) DCL

(ii) _____ database model is suitable for many-to-many relationship.

(a) Network (b) Relational

(c) Hierarchical (d) None of these

(iii) Which of the following control is not a part of toolbox ?

(a) Label control (b) Frame control

(c) Form control (d) Pointer tool

(iv) The _____ property determines how the command button responds to ESC key.

(a) Default (b) Caption

(c) Cancel (d) Name 2

(c) Answer in **one** sentence each :

(i) What is a domain ?

(ii) What is an entity ?

(iii) What is a project ?

(iv) What is an option explicit statement ? 4

2. (a) Explain the following :

(i) Hierarchical Data Model

(ii) Object-Oriented Model. 6

(b) Explain the data dictionary and its functions. 6

OR

3. (a) Explain Database Management Systems and its objectives. 6

(b) Explain Data Inconsistency in DBMS. 6

4. (a) Explain entity relational model with suitable example. 6

(b) Explain various anomalies with suitable example. 6

OR

5. (a) What is E-R diagram ? How is it reduced to tables ? 6

(b) Explain the following :

(i) Entity Integrity Rules

(ii) Full Functional Dependency

(iii) 3NF (Third Normal Form). 6

6. (a) Explain various types of SQL statements. 6

(b) Explain all DML commands with syntax and suitable example. 6

OR

7. (a) Explain the following operators with example :

(i) BETWEEN

(ii) LIKE

(iii) IN. 6

(b) Explain the following clauses with example :

(i) GROUP BY

(ii) HAVING

(iii) ORDER BY. 6

8. (a) Explain the following :

(i) Visual programming

(ii) Event-driven programming. 6

(b) Explain Form window with its basic properties. 6

OR

9. (a) Explain the following :

(i) New Project Window

(ii) Project Explorer Window. 6

(b) Explain the difference between :

(i) Text Box and Label Controls

(ii) Picture Box and Image Controls. 6

10. (a) Explain the declaration of following :

(i) String Variables

(ii) Variant Variables

(iii) Boolean Variables

(iv) Date Variables. 6

(b) Explain Do Until ..... Loop with suitable program example. 6

OR

11. (a) Explain Application Wizard for creating menus for your application. 6

(b) Explain the following operators :

(i) Conditional Operators

(ii) Logical Operators. 6

12. (a) Explain the following with respect to MsgBox ( ) :

(i) Named constant

(ii) Default buttons

(iii) Specifying Icons. 6

(b) Explain the following with syntax and example :

(i) Sub procedure

(ii) Function procedure

(iii) Call by reference. 6

OR

13. (a) Explain checkbox and option button controls with their basic properties. 6

(b) Explain the following functions with example :

(i) Round ( )

(ii) Int ( )

(iii) IsEmpty ( )

(iv) Mid ( )

(v) IIF ( )

(vi) Chro ( ). 6