

B.Sc. (Part—III) Semester—V Examination
COMPUTER SCIENCE
(RDBMS and Visual Basic)

Time : Three Hours]

[Maximum Marks : 80

Note :—(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) A table with column and rows is called as _____.

(ii) A set of values for an attribute is called _____.

(iii) A _____ property determines whether check box is selected or not.

(iv) _____ is the foundation control in any window based application. 2

(b) Choose the correct alternative :

(i) The number of attributes in the relation is called _____ of relation.

(a) Relation

(b) Tuple

(c) Degree

(d) Cardinality

(ii) SQL can be used to _____.

(a) Modify database data only

(b) Query database data only

(c) Create database structure only

(d) All of the above

(iii) _____ act as a container for all the controls that make up the user interface.

(a) Form Layout Window

(b) Object

(c) Form

(d) Control

(iv) Which of the following operators is used for performing modulo division ?

(a) %

(b) Mod

(c) \

(d) / 2

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

(i) What is the difference between CHAR and VARCHAR ?

(ii) What is a Data Definition Language ?

(iii) What is the difference between Label Control and Text Box Control ?

(iv) What is nested loop ? 4

2. (a) Explain three levels of database architecture. 6
(b) Explain the following :
(i) Data Dictionary
(ii) Data Independence. 6

OR

3. (a) Explain database system with its components. 6
(b) What are the advantages and disadvantages of DBMS ? 6
4. (a) What is normalization ? Explain the 2NF with suitable example. 6
(b) Explain the concept of functional dependency with suitable example. 6

OR

5. (a) Explain the following :
(i) Relation
(ii) Domain
(iii) Attribute. 6
(b) Explain various keys used in defining the database. 6
6. (a) Explain the components of SQL in database system. 6
(b) State the purpose of the following commands with syntax and suitable example :
(i) CREATE
(ii) ALTER
(iii) SELECT. 6

OR

7. (a) What is SQL ? What are the characteristics of SQL ? 6
(b) What is view ? How can views be created and dropped ? 6
8. (a) Explain the various components of Visual Basic IDE (Integrated Development Environment). 6
(b) Explain the following controls :
(i) Text Box
(ii) Picture Box
(iii) Image. 6

OR

9. (a) Explain any six common properties of Visual Basic Controls. 6
(b) What is an event ? Explain the concept of event driven programming. 6

10. (a) Explain menu editor to create menus for your application with suitable example. 6
(b) Explain select case statement with clause 'Is' with suitable example. 6

OR

11. (a) Explain the following :
(i) Numeric Data Types in VB
(ii) Non-Numeric Data Types in VB. 6
(b) Explain the following with example :
(i) Nested If.....Else
(ii) Nested for Loop. 6
12. (a) Explain the syntax of MsgBox() function with suitable example. 6
(b) Explain the following functions :
(i) Sgn()
(ii) Replace()
(iii) Choose()
(iv) CSng()
(v) Now()
(vi) Trim(). 6

OR

13. (a) Explain InputBox() function with syntax and suitable example. 6
(b) Explain the use of Check Box and Option button with suitable example. 6

