

B.Sc. (Part-II) (Semester-IV) Examination
COMPUTER APPLICATIONS (VOC.) (NEW)
(Database Management System)

Time : Three Hours]

[Maximum Marks : 80

- Note** :— (1) Question No. 1 is compulsory.
(2) Question Nos. 2 to 13 carry equal marks.
(3) Assume suitable data and draw labelled diagram wherever necessary.

1. (A) Fill in the blanks :

- (i) Existence of _____ entity depends on another entity.
- (ii) _____ command is used to modify the existing row of table.
- (iii) Non-key of one table becomes a primary key of another table is known as _____.
- (iv) _____ command is used to display the data from table. 2

(B) Choose the correct alternative and rewrite the statement :

- (i) _____ is not number function.
 - (a) Lower (b) AVG
 - (c) MAX (d) ABS
- (ii) Rows in the table (relation) are called _____.
 - (a) Attribute (b) Tuples
 - (c) Node (d) Entity
- (iii) _____ data type is used to store binary data.
 - (a) Number (b) RAW
 - (c) BIN (d) CHAR
- (iv) _____ statement makes changes permanent.
 - (a) Commit (b) Roll back
 - (c) MKPR (d) TRIGGER 2

(C) (i) What is system privilege ?

(ii) What is E-R diagram ?

(iii) What is BCNF ?

(iv) What is save point ? 4

2. (A) Describe Architecture of Database system. 6

(B) Explain Hierarchical database model with example. 6

OR

3. (A) What are various components of database system ? 6

(B) Explain Network database model with example. 6

4. (A) What is E-R diagram ? Describe symbols used in it. 6

(B) Describe the following :

(i) Relation

(ii) Attribute

(iii) Domain 6

OR

5. (A) Explain the following :
(i) Functional dependency
(ii) Entity and entity set 6
(B) Explain 3 NF with example 6
6. (A) Describe various components of SQL. 6
(B) Explain following with syntax and example :
(i) INSERT
(ii) UPDATE 6

OR

7. (A) Describe ORDER BY clause with example. 6
(B) Explain rollback segment. 6
8. (A) Describe various integrity constraints. 6
(B) Describe the following Date functions :
(i) add_months ()
(ii) Last_day 6

OR

9. (A) Describe following with syntax and example :
(i) ABS
(ii) SQRT
(iii) SIGN 6
(B) What is join ? Explain self join with example. 6
10. (A) Describe various data types in PL/SQL with example. 6
(B) Describe following :
(i) Creating BEFORE trigger
(ii) Creating AFTER trigger 6

OR

11. (A) Differentiate between implicit and explicit cursors. 6
(B) Describe concept of package and its creation. 6
12. (A) Describe various locking levels. 6
(B) Describe SQL security concept. 6

OR

13. (A) What is privileges ? What are syst privileges ? 6
(B) How views are useful in security enforcement ? 6