# Bachelor of Commerce (Computer Application) (B.C.C.A) Semester–III Examination DATABASE MANAGEMENT SYSTEMS

# Compulsory Paper—4

Time: Three Hours] [Maximum Marks: 80 **N.B.** :— (1) **ALL** questions are compulsory. (2) Draw well labelled diagram wherever necessary. PART—A **Note**:—(1) Each question carries 2 marks. (2) Answers should not be in more than 5 lines. (a) Define data. 1.  $8 \times 2 = 16$ (b) What are fields? (c) What are attributes? (d) What is E-R model? (e) What is table? (f) What is SQL? (g) What is DBA? (h) What is join? PART—B **Note** :—(1) Each question carries 3 marks. (2) Answers should not be in more than **10** lines. 2. (a) What is pointer? List its types.  $8 \times 3 = 24$ (b) Define the terms – Field. Record and files. (c) What is BCNF? (d) What is database design? (e) Write down the features of SQL. (f) Explain Update command with example. (g) What is dual? (h) What is the role of DBA?

#### PART—C

Note:—(1) Each question carries 5 or 10 marks.

(2) Answers should not be in more than **400** words for **5** marks questions and **600** words for **10** marks questions.

## 3. EITHER

- (a) Explain different types of data model. 5
- (b) Explain many-to-many association with suitable example. 5

## OR

(c) Describe location methods of data structure.

#### 4. EITHER

- (a) What is third normal form (3NF)? Explain with example.
- (b) Explain relational data model with example. 5

#### OR

(c) What is physical data model and explain any two models under it.

#### 5. EITHER

- (a) Explain select command in SQL with its syntax and example. 5
- (b) How to Eliminate duplicate rows when using select command? Give suitable example.

# OR

(c) How to create a table in SQL? What are the rules to create a table? Explain with syntax and suitable example.

#### 6. EITHER

- (a) What are the arithmetic operators in SQL?
- (b) Explain with example data related function in SQL. 5

### OR

- (c) Write short notes on:
  - (i) Union clause
  - (ii) Intersect clause
  - (iii) Minus clause.