## BHARATI VIDYAPEETH INSTITUTE OFTECHNOLOGY

Question Bank (K – Scheme)

#### Unit Test-I

Program: - CM/IF3I

Semester: - III

Course and code: - Database Management System (313302)

### Chapter no: 1 Introduction to database system

#### (2 Marks)

- 1) List any four applications of DBMS.(CO1)
- 2) State the four database users. (CO1)
- 3) Define Schema and Instance (CO1)
- 4) Define data independence and list its types. (CO1)

### (4 Marks)

- 5) Explain any four advantages of DBMS over file processing system.(CO1)
- 6) Explain Data Abstraction with neat diagram.(CO1)
- 7) Describe any four Codds rules. (CO1)
- 8) Draw and explain overall structure of DBMS. (CO1)
- 9) Explain two tier and three tier architecture of DBMS.(CO1)
- 10) Explain Hierarchical data model with example. (CO1)
- 11) Distinguish between Relational and Network Model.(CO1)

#### Chapter no: 2 Relational data model

#### (2 Marks)

- 1) Define Tuple and Attribute.(CO2)
- 2) Define Primary Key and Foreign Key.(CO2)
- 3) List any four symbols used in ER diagram.(CO2)
- 4) Define normalization(CO2)

#### (4 Marks)

- 5) Describe Domain integrity constraint with syntax and example(CO2)
- 6) Describe Referential integrity constraint with syntax and example(CO2)
- 7) Explain different types of attributes used to draw ER diagram(CO2)
- 8) Differentiate between strong and weak entity set.(CO2)
- 9) Draw ER diagram for Banking system(CO2)
- 10) Draw ER diagram for Library Management System. (CO2)
- 11) Explain 2NF with example (CO2)

### Chapter no: 3 Interactive SQL and performance tuning

#### (2 Marks)

- 1) Enlist DDL commands.(CO3)
- 2) Enlist DML commands.(CO3)
- 3) Define join and list its types(CO3)

### (4 Marks)

- 4) Describe group by and having clause with syntax and example(CO3)
- 5) Explain set operators with example(CO3)
- 6) Explain any four string functions with example(CO3)
- 7) Explain any four date functions with example(CO3)
- 8) Consider the following database.

# Employee (emp\_id,emp\_name,emp\_city,emp\_dept,join\_date) (CO3)

- i) Write a command to create structure of employee table
- ii) Write a command to add new column salary in employee table
- iii) Write a command to change column name emp\_city to emp\_addr
- iv) Write a command to remove join\_date column from employee table
- 9) Consider the following database.

# Employee (emp\_id,emp\_name,emp\_city,emp\_job,emp\_dept,join\_date) (CO3)

- i) Insert a record of employee
- ii) Modify the name of employee "Raj" to "Rajesh"
- iii) Delete employee details who works in Marketing dept
- iv) Display details of employee who works as clerk, salesman or manager
- 10) Consider the following database.

## Employee (emp\_id,emp\_name,emp\_city,emp\_dept,join\_date) (CO3)

- i) Display the names of employee in capital letters
- ii) Display details of employee who lives in city pune or Mumbai.
- iii) Display the count of employees department wise.
- iv) Display the employee details whose department is Sales.
- v) Display names of employee who joined before "01/01/2000"