ISLAMIAH COLLEGE [AUTONOMOUS] VANIYAMBADI

U0CS6001 **APRIL 2015**

DATABASE MANAGEMENT SYSTEM

TIME: 3 Hrs. MAX. MARKS: 75

PART – A (5 X 6 = 30 MARKS)
Answer ALL the Questions

1. Write down the advantages of DBMS.
2. Define class diagrams.
3. What is the basic structure of SQL SELECT statement?
4. Define file server.
5. What is DBA?
6. What is normalization?
7. Differentiate hierarchical and network model.
8. What is the use of LIKE operator in SQL?
9. Define cursors.
10. What do you mean by triggers?

PART- B (5 X 5 =25 MARKS)
Answer ALL the questions

11. a) Differentiate database approach from conventional file based approach.

    OR

    b) Describe various components of DBMS environment and how it relates to each other.

12. a) Explain BCNF with examples..

    OR

    b) Discuss network model with example.

13. a) Write short notes DCL statements.

    OR

    b) Write a PL/SQL block to find the sum of n numbers.

14. a) Define various keys used in DBMS.

    OR

    b) Discuss SET operations of relational algebra.

15. a) Describe error handling with examples.

    OR

    b) Discuss integrity constraints of Database.

PART – C (3 X 10=30 MARKS)
Answer ANY three questions

16. Explain in detail about different data models with neat diagram..

17. Draw an ER diagram for a life insurance company with all required components and explain them

18 Expalin Multivalued dependencies. And also discuss fourth and fifth normal form.

19. Discuss in detail about all DML commands with example for each case.

20. Discuss embedded SQL in detail.

ISLAMIAH COLLEGE [AUTONOMOUS] VANIYAMBADI

U0CS6001 **APRIL 2015**

DATABASE MANAGEMENT SYSTEM

TIME: 3 Hrs. MAX. MARKS: 75

PART – A (5 X 6 = 30 MARKS)
Answer ALL the Questions

1. What is DBMS?
2. Distinguish tehe terms primary key and
3. Specify the difference between physical and logical data independence.
4. Mention any six fundamental operations of relational algebra and their symbols.
5. List out the reasons why null values are introduced in Database.
6. Define multi valued dependency.
7. Show that the relational database in BCNF should also be in 3NF.
8. Write a procedure in My SQL.
9. How do you declare, open and fetch a cursor?
10. Create a table for an employee with the necessary fields and constraints.

PART - B (5 X 5 =25 MARKS)
Answer ALL the questions

11. a). Explain associations and relationships with example.

    OR

    b). Write short notes on domain key normal form.

12. a). Explain testing queries with example.

    OR

    b). Discuss on converting a class diagram into normalized tables with example.

13. a). Write short notes on data types.

    OR

    b). Write short notes on DDL statements.

14. a). Construct an ER diagram for a company which sells and service i. cars.

    OR

    b). Discuss the mapping cardinalities of DBMS.

15. a). Describe exception handling with examples.

    OR

    b). Discuss about triggers.

PART – C (3 X 10=30 MARKS)
Answer ANY three questions

16. With neat diagram explain the architecture of database.

17. Explain relational algebra operations with example for each case.

18. How do triggers offer powerful mechanism for dealing with changes to database with suitable example.

19.Discuss in detail about data dependencies. And explain 1NF,2NF,3NF with example.

20.Discuss tuple relational calculus in detail.

ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI

END SEMESTER EXAMINATIONS, NOVEMBER 2016

Time: 3 Hours Max.Marks : 75

Subject: Database Management System

Sub. Code: U3CS5001 / U3SW5001 / U3BC5001

Part A (10 X 2 =20)

Answer ALL the Questions

1. Define DBMS.
2. Define E-R Diagram
3. What is Domain relation and Calculus?
4. Define Tuple relation and Calculus.
5. What is nested sub query?
6. What are set operations?
7. Define 1NF.
8. Expand BCNF
9. Define distributed transaction.
10. What is concurrency control?

Part - B (5 X 5 =25)

Answer ALL the Questions

11. (a) Explain the purpose of Database Systems.

(OR)

(b) Explain about Entity Relationship Model

12.(a) Discuss DML of the database.

(OR)

(b) Explain the structure of Relational database.

13 (a) Explain the basic structures of sub quires.

(OR)

(b) Explain Aggregate functions with examples

14. (a) Discuss the features of Good Relational Design.

(OR)

(b) Write notes on Functional Dependency.

15. (a) Explain the parallel systems

(OR)

(b) Discuss about concurrency control in distributed databases.

Part C (3 X10 =30)

Answer any THREE Questions

16. Explain in detail the Database Architecture.
17. Explain the following :

(a) Domain relational Calculus

(b) Tuple relational Calculus

18. Explain the following:

(a) Nested sub queries

(b) Embedded SQL

19. Explain the Decomposition using Multivalued Dependencies.
20. Explain the Server System Architecture.

ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI

END SEMESTER EXAMINATIONS, NOVEMBER 2016

Time: 3 Hours Max.Marks : 75

Subject: Database Management System

Sub. Code: U3CS5001 / U3SW5001 / U3BC5001

Part A (10 X 2 =20)

Answer ALL the Questions

1. Define DBMS.
2. Define E-R Diagram
3. What is Domain relation and Calculus?
4. Define Tuple relation and Calculus.
5. What is nested sub query?
6. What are set operations?
7. Define 1NF.
8. Expand BCNF
9. Define distributed transaction.
10. What is concurrency control?

Part - B (5 X 5 =25)

Answer ALL the Questions

11. (a) Explain the purpose of Database Systems.

(OR)

(b) Explain about Entity Relationship Model

12.(a) Discuss DML of the database.

(OR)

(b) Explain the structure of Relational database.

13 (a) Explain the basic structures of sub quires.

(OR)

(b) Explain Aggregate functions with examples

14. (a) Discuss the features of Good Relational Design.

(OR)

(b) Write notes on Functional Dependency.

15. (a) Explain the parallel systems

(OR)

(b) Discuss about concurrency control in distributed databases.

Part C (3 X10 =30)

Answer any THREE Questions

16. Explain in detail the Database Architecture.
17. Explain the following :

(a) Domain relational Calculus

(b) Tuple relational Calculus

18. Explain the following:

(a) Nested sub queries

(b) Embedded SQL

19. Explain the Decomposition using Multivalued Dependencies.
20. Explain the Server System Architecture.

ISLAMIAH COLLEGE (AUTONOMOUS), VANIYAMBADI END SEMESTER EXAMINATIONS		
U0BC6002		APRIL/MAY-2017
DATABASE MANAGEMENT SYSTEM		
Time: 3 Hrs		Max.Marks:75

PART - A (10 X 2 = 20)
Answer ALL the Questions

1. Define Data.
2. What are the different database models available?
3. Define Tuple.
4. What are the components of E-R diagrams?
5. What is meant by Normalization?
6. Give the acronym of DDL.
7. Write the Syntax for Average function.
8. What is meant by decomposition?
9. Define Cursor.
10. Give the acronym of BCNF.

PART – B (5 X 5 = 25)
Answer ALL the Questions

11. (a) Write short note on entity and entity set.
    (OR)
    (b) Explain in detail about hierarchical model with example.
12. (a) Explain in detail the structure of a Relational Data base.
    (OR)
    (b) Explain the concept of first normal form with example.
13. (a) Explain any 4 Date Functions with example.
    (OR)
    (b) Explain with an example about usage of "WHERE" clause.
14. (a) Explain the concept of Functional dependency.
    (OR)
    (b) Write short notes on arithmetic operations with example.
15. (a) Write short note on Integrity Constraints.
    (OR)
    (b) Write short notes on integrity constraints.

PART - C (3 X 10 = 30)
Answer any THREE Questions

16. Explain in detail the purpose of Database System.
17. Write short notes on tuple relational calculus with examples.
18. Explain in detail with proper example –Nested sub Queries.
19. Write short notes on second normal form with example.
20. Define Cursor. Explain all the properties of cursors.

ISLAMIAH COLLEGE (AUTONOMOUS), VANIYAMBADI END SEMESTER EXAMINATIONS		
U0CS6001/U0SW6001		APRIL/MAY-2017
DATABASE MANAGEMENT SYSTEM		
Time: 3 Hrs		Max.Marks:75

PART - A (10 X 2 = 20)
Answer ALL the Questions

1. Write down the advantages of DBMS.
2. Describe Entity – Relationship model.
3. What is the basic structure of SQL 'SELECT' statement?
4. What are the components of E-R diagrams?
5. What is DBA?
6. State the query to display the department details in ascending order using dept_name.
7. Differentiate hierarchical and network model.
8. What is the First normal form?
9. Define cursors.
10. Give the acronym of BCNF.

PART – B (5 X 5 = 25)
Answer ALL the Questions

11. (a) Differentiate database approach from conventional file based approach.
    (OR)
    (b) Write in brief about Data-definition language.

12. (a) Explain BCNF with examples.
    (OR)
    (b) What is Cartesian product and projection? Explain it with example.

13. (a) Write short notes an DCL statements.
    (OR)
    (b) Explain with an example about usage of "WHERE" clause.

14. (a) Define various keys used in DBMS.
    (OR)
    (b) State and explain the First Normal Form with example.

15. (a) Describe error handling with examples.
    (OR)
    (b) Explain in detail about procedures.

PART - C (3 X 10 = 30)
Answer any THREE Questions

16. Explain in detail about different data models with a neat diagram.
17. Write short notes on tuple relational calculus with examples.
18. Explain Multivalued dependencies. And also discuss fourth and fifth normal form.
19. State and explain the second and third normal form.
20. Discuss embedded SQL in detail.

ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI

END SEMESTER EXAMINATIONS APRIL/MAY 2017

Time: 3 Hrs **Max. Marks: 75**

Subject: Database Management System

Sub. Code: U3CS5001 / U3BC5001 / U3SW5001

Part A **Answer ALL the Questions** **(10X2 = 20)**

1. Define Database Management System.
2. Mention any Four data models in DBMS
3. What is mean by Database Schema and Database Instance?
4. Define Candidate Key
5. Mention any Four Aggregate functions in SQL
6. What is mean by Referential Integrity?
7. What is mean by Functional Dependency?
8. Define BCNF.
9. What is mean by Transaction Server?
10. Mention the two subsystems of Transaction system.

Part B **Answer ALL the Questions** **(5X5 = 25)**

11. a) Write short note on data abstraction

(OR)

b) Write short note on attributes.

12. a) Explain in detail various join operations.

(OR)

b) Write short note on Domain Relational Calculus

13. a) Write short note on Embedded SQL

(OR)

b) List out the basic domain types available in SQL

14. a) Write short First Normal Form

(OR)

b) Explain with example Fourth Normal Form.

15. a) Write short note on distributed system

(Or)

b) Write short note Distributed Storage

Part C **Answer any THREE Questions** **(3X10 = 30)**

16. Explain in detail Architecture of a Database
17. Explain with example fundamental Relational Algebra operations
18. Explain in detail Basic structure of SQL
19. How can we do Decomposition using functional Dependency in a database
20. Explain in detail Server System Architecture.

ISLAMIAH COLLEGE [AUTONOMOUS] VANIYAMBADI
ARREAR EXAMINATIONS, OCTOBER – 2018

Time: 3 Hours Max. Marks: 75

Subject: Database Management System

Sub. Code: U3CS5001 / U3BC5001

PART – A (10 x 2 = 20)
Answer ALL the Questions

1. What is Data dictionary?
2. Define entity set.
3. What is relational databases?
4. Define Null values.
5. Differentiate Commit and Roll back.
6. What are set operations?
7. Define 1NF.
8. Expand BCNF
9. Define distributed transaction.
10. What is concurrency control?
11.

PART – B (5 x 5 = 25)
Answer ALL the Questions

1) a) Explain about Entity Relationship Model
(Or)
b) Explain Constraints in Entity-Relationship model.

12) a) Describe the Select operation in relational algebra.
(Or)
b) Discuss DML of the database.

13) a) Write short notes on: Nested subqueries.
(Or)
b) Discuss briefly on Joined relations.

14) a) Write short notes of: First Normal form with example.
(Or)
b) Discuss the features of Good Relational Design.

15) a) Explain distributed query processing
(Or)
b) Explain distributed data storage

PART – C (3 x 10 = 30)
Answer any THREE Questions

16) Explain the concept of DDL and DML

17) Explain briefly on:
i) Tuple Relational calculus
ii) Domain Relational calculus

18) Explain Embedded SQL

19) Explain the Decomposition using Multivalued Dependencies.

20) Explain the Server System Architecture.

ISLAMIAH COLLEGE [AUTONOMOUS] - VANIYAMBADI

ARREAR SEMESTER EXAMINATIONS – OCTOBER - 2018

Time: 3 Hrs Max. 75 Marks

Subject: Database Management System **Sub. Code: U5CS6002**

PART-A (10 X 2 = 20)

Answer ALL the Questions

1. What is DBMS?
2. Distinguish the terms primary key and foreign key.
3. List the types of data independence.
4. Name any four fundamental operations of relational algebra and their symbols.
5. Define NULL attributes.
6. Define dependency preservation.
7. Compare BCNF with 3NF.
8. Write a procedure in My SQL.
9. What is the use of cursor?
10. Create an employee table and specify the constraints in it.

PART-B (5 X 5 =25)

Answer ALL the Questions

11. a). List and explain the components of ER diagram.

OR

b). Write short notes on domain key normal form.

12. a). Explain testing queries with example.

OR

b). Discuss relational database model in brief.

13. a). Write short notes on data abstractions.

OR

b). Write short notes on DML statements.

14. a). List and explain the demerits of DBMS.

OR

b). Discuss the mapping cardinalities of DBMS.

15. a). Describe exception handling with examples.

OR

b). Elaborate about triggers.

PART-C (3 X 10=30)

Answer any THREE Questions

16. Explain the overall structure of DBMS with a neat diagram.

17. What is relational algebra? Explain the fundamental operations with suitable example.

18. Elaborate Cursor with suitable example.

19. Discuss in detail about data dependencies. And explain 1NF,2NF,3NF with example.

20. Discuss Domain relational calculus in detail.

ISLAMIAH COLLEGE [AUTONOMOUS] -VANIYAMBADI
END SEMESTER EXAMINATIONS, APRIL-2019
U5CC6002: Database Management System

TIME: 3 Hrs **MAX. 75 MARKS**

Class: III B.Sc (CS,SW) & III B.C.A **Semester VI**

PART-A (10 X 2 = 20 MARKS)
Answer ALL Questions

1. What is data abstraction? Mention its levels.
2. What is extension and intension?
3. What are *null* values? Why they should be avoided?
4. What is degree of a relation and degree of relationship type?
5. What is a Composite Primary Key?
6. What are the SQL logical operators?
7. Define functional dependency.
8. Why it necessity to decompose a relation?
9. Define lock. How it is released?
10. Write the advantages of query.

PART-B (5 X 5 = 25 MARKS)
Answer ALL Questions

11. (a). How the logical structure of a database can be expressed graphically by an E-R diagram?

(Or)

(b). Write a trigger to store user's login name and current time, whenever a record is inserted.

12. (a) Consider the relational database given below:

employee (emp_name, street, city)
works (emp_name, company_name, Salary)
company (company_name, City)

For each of the given query, give an expression in relational algebra,

(i). Find the emp_name, street and cities of residence whose salary exists in between 10000 and 20000 and work for ABC Ltd.

(ii). Find the name, street and cities of employees who live in the same city as the company they work for.

(Or)

(b) Let R = (A, B) and S = (A, C), and let r (R) and s (S) be relations. Using the special constant *null*, write tuple-relational-calculus expressions equivalent to each of the following:

a. $r \ltimes s$
b. $r \rtimes s$
c. $r \bowtie s$

13. (a) Explain the embedded SQL with a suitable example.

(Or)

(b) Write sql query to find second highest salary from employees table.

14. (a) What is decomposition? What are the desirable properties of decomposition?

(Or)

(b).Give an example of a relation schema R and a set of dependencies such that R is in BCNF, but not in 4NF.

15. (a) What is a timestamp? State its advantages.

(Or)

(b) Give an example where lazy replication can lead to an inconsistent database state even when updates get an exclusive lock.

PART-C (3 X 10 = 30 MARKS)
Answer any THREE Questions

16. What is the need for triggers? Write a trigger to display old and new values whenever a record is updated.

17. Consider the relational database.

employee(person_name,street,city)
works(person_name,company_name,salary)
company(company_name,city)
manages(person_name,manager_name)

Give an expression in the relational algebra to express each of the following queries:

a. Delete all tuples in the works relation for employees of Small Bank Corporation.
b. Find the company with the most employees.
c. Find the company with the smallest payroll.
d. Find those companies whose employees earn a higher salary, on average, than the average salary at First Bank Corporation.

18. What are stored-procedures? And what are the advantages of using them.

19. State the goal of decomposition / normalization. Explain the different level of normalization.

20. Discuss in detail on centralized system.

ISLAMIAH COLLEGE [AUTONOMOUS] VANIYAMBADI
END SEMESTER EXAMINATIONS, APRIL – 2019

Time: 3 Hrs. Max. Marks: 75

Subject: Database Management System **Sub. Code: U0BC6002**

PART – A (10 X 2 = 20 MARKS)
Answer ALL the Questions

1. What is meant by database
2. What are the different models available
3. What is the usage of primary key
4. What are the componenets of E-R diagrams
5. What are the different set operations
6. What is normalization?
7. Differentiate hierarchical and network model.
8. What is the use of LIKE operator in SQL?
9. Define cursors.
10. What do you mean by triggers?

PART- B (5 X 5 =25 MARKS)
Answer ALL the questions

11. a) Give an account on database design
    OR
    b) Explain in detail about hierarchical model with example

12. a) Explain BCNF with examples..
    OR
    b) Discuss network model with example.

13. a) Write short notes DCL statements.
    OR
    b) Explain in detail about types of triggers

14. a) Define various keys used in DBMS.
    OR
    b) Write short notes on arithmetic's operations with example

15. a) Describe error handling with examples.
    OR
    b) Discuss integrity constraints of Database.

PART – C (3 X 10=30 MARKS)
Answer any THREE questions

16. Explain in detail about different data models with a neat diagram..
17. Write short notes on tuple relational calculus with examples
18. Explain briefly about nested queries with examples
19. Explain in detail Normalization
20. Explain in detail a. Triggers(5) b. Cursors(5)

ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI
END SEMESTER EXAMINATIONS APRIL / MAY – 2019

Time: 3 Hrs Max. Marks: 75

Subject: Database Management System
Sub. Code: U3CS5001 / U3BC5001

PART – A (10 x 2 = 20)
Answer ALL the Questions

1. Define DBMS.
2. Define E-R Diagram
3. What is relational databases?
4. Define Null values.
5. What is nested sub query?
6. Referential Integrity?
7. What is mean by Functional Dependency?
8. Define BCNF.
9. What is mean by Transaction Server?
10. What is concurrency control?

PART – B (5 x 5 = 25)
Answer ALL the Questions

11. a) Explain briefly about Data abstraction.
(OR)
b) Write short note on attributes.

12. a) Explain the Division operation with example.
(OR)
b) Write short note on Domain Relational Calculus

13. a) Write short note on Embedded SQL
(OR)
b) Discuss briefly on Joined relations.

14. a) Write notes on Functional Dependency.
(OR)
b) Explain with example Fourth Normal Form.

15. a) Write short note on distributed system
(Or)
b) Explain distributed query processing

PART – C (3 x 10 = 30)
Answer any THREE Questions

16. Explain in detail Architecture of a Database
17. Discuss Tuple Relational calculus..
18. Explain Embedded SQL
19. Explain the Decomposition using Multivalued Dependencies.
20. Explain in detail Server System Architecture.

ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI
END SEMESTER EXAMINATIONS – MAY - 2020

Time: 3 Hrs Max. Marks: 75

Subject: Database Management System
Sub. Code: U0CS6001 / U0SW6001

PART - A (10 X 2 = 20)
Answer ALL the Questions

1. Define schema
2. Describe Entity – Relationship model.
3. What is Foreign key?
4. What is the usage of projection?
5. What is DBA?
6. Define BCNF normal form.
7. Differentiate hierarchical and network model.
8. Define function?
9. Define cursors.
10. What are the various DML commands?

PART - B (5 X 5 = 25)
Answer ALL the Questions

11. (a) What is the purpose of database system? Explain

(OR)

(b) Write in brief about Data-definition language.

12. (a) Explain BCNF with examples.

(OR)

(b) Write about the various keys used in relational database design.

13. (a) Explain in detail about the string operations

(OR)

(b) What are the various Aggregate functions? Explain

14. (a) Define various keys used in DBMS.

(OR)

(b) State and explain the 3NF with example

15. (a) Discuss in detail about triggers with example

(OR)

(b) Explain in detail about procedures.

PART - C (3 X 10 = 30)
Answer any THREE Questions

16. Explain in detail about Database Architecture
17. What are the Relational algebra operations? Explain
18. Discuss in detail about fourth normal form and BCNF.
19. Write in detail about the modification of databases.
20. Discuss embedded SQL in detail.

Due to COVID-19 Pandemic
Sanitize Your Hands
Wear Face Mask
Follow Social Distancing Norms

ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI
END SEMESTER EXAMINATIONS – MAY - 2020

Time: 3 Hrs Max. Marks: 75

Subject: Database Management System

Subject Code: U5SW6002 / U5CS6002 / U5BC6002 / U5CC6002

PART - A (10 X 2 = 20)
Answer ALL the Questions

1. What is a database?
2. Define: Constraints.
3. What is Query?
4. Write down the structure of a Relational Model.
5. Define: DDL.
6. Mention the SQL data types.
7. Define: Functional dependency.
8. What is Normalization?
9. Explain Distributed Query Processing.
10. What is server-client architecture?

PART - B (5 X 5 = 25)
Answer ALL the Questions

11. (a) List the advantages of DBMS over traditional file systems.

(Or)

(b) Discuss shortly about keys.

12. (a) Compare Tuple Relational Calculus with Domain Relational Calculus.

(Or)

(b) Give an explanation about formal query language.

13. (a) Shortly explain nested sub queries.

(Or)

(b) What is JOIN? Explain with neat example.

14. (a) State the three anomalies to be considered while manipulating a database.

(Or)

(b) Illustrate the concept of Loseless decomposition.

15. (a) Explain Concurrency control in Distributed Databases

(Or)

(b) What is a Distributed Transaction and explain its properties?

PART - C (3 X 10 = 30)
Answer any THREE Questions

16. Explain overall system structure of database.
17. Discuss about Relational Algebraic Operations with examples.
18. Briefly explain aggregate functions.
19. Discuss in detail about Fourth Normal Form (4NF).
20. Describe the evolution form centralized DBMS to Distributed DBMS.

Due to COVID-19 Pandemic
Sanitize Your Hands
Wear Face Mask
Follow Social Distancing Norms

ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI
END SEMESRTER EXAMINATIONS, DECEMBER - 2020

Time: 3 Hrs **Max. Marks: 75**

Subject: Database Management System

Subject Code: U5CS6002 / U5CC6002

PART - A (10 X 2 = 20)
Answer ALL the Questions

1. Define Relationship Sets.
2. What is meant by hierarchical model?
3. Define union compatibility?
4. What is atomicity and aggregation?
5. Distinguish between static and dynamic SQL.
6. Define: Subquery.
7. What are the categories of Normalization?
8. What are pitfalls in database design?
9. Define: Distributed Database.
10. Explain Concurrency control.

PART - B (5 X 5 = 25)
Answer ALL the Questions

11. (a) Briefly explain overall system structure of database.

(Or)

(b) What is an Attribute? What are the types of attributes available?

12. (a) Explain the relational algebra projection operation.

(Or)

(b) Illustrate the structure of Relational databases.

13. (a) Give short notes on SQL and its basic structure.

(Or)

(b) Explain Embedded SQL with suitable example.

14. (a) Explain BCNF with example

(Or)

(b) Define the concept of Second Normal Form.

15. (a) Explain shadow paging recovery scheme in detail.

(Or)

(b) Explain Distributed Database storage.

PART - C (3 X 10 = 30)
Answer any THREE Questions

16. Explain the concept of ER diagrams in detail.
17. Explain different types of outer join operations with example.
18. Explain Set operations and SQL data types.
19. Discuss the Normalization concept with suitable example.
20. Explain Distributed database design concepts.

ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI
END SEMESTER EXAMINATIONS, DECEMBER - 2020

Time: 3 Hrs **Max. Marks: 75**

Subject: Database Management System **Subject Code: U5SW6002**

PART - A (10 X 2 = 20)
Answer ALL the Questions

1. Define: E- R Model.
2. What is Foreign key?
3. Define: Relational Algebra.
4. How can you define tuple?
5. What is called as SQL?
6. Define: Subquery.
7. What are the categories of Normalization?
8. What are pitfalls in database design?
9. Define: Distributed Database.
10. Explain Concurrency control.

PART - B (5 X 5 = 25)
Answer ALL the Questions

11. (a) Briefly explain overall system structure of database.

(Or)

(b) What is an Attribute? What are the types of attributes available?

12. (a) Explain the relational algebra projection operation with examples.

(Or)

(b) Illustrate the structure of Relational databases.

13. (a) Give short notes on SQL and its basic structure.

(Or)

(b) Explain Embedded SQL with suitable example.

14. (a) Describe in detail on relational database design.

(Or)

(b) Define the concept of Second Normal Form.

15. (a) Write short notes on Distributed Query processing.

(Or)

(b) Explain Distributed Database storage.

PART - C (3 X 10 = 30)
Answer any THREE Questions

16. Explain the concept of ER diagrams in detail.
17. Give detailed notes on Relational model and structure.
18. Explain Set operations and SQL data types.
19. Discuss the Normalization concept with suitable example.
20. Explain Distributed database design concepts.

ISLAMIAH COLLEGE [AUTONOMOUS] VANIYAMBADI
END SEMESTER EXAMINATIONS, FEBRUARY - 2022

Time: 3 Hours Max. Marks: 75

Subject: Database Management System **Sub. Code: U3BC5001**

PART – A (10 x 2 = 20)
Answer ALL the Questions

1. What is Data dictionary?
2. Define entity set.
3. What is relational databases?
4. Define Null values.
5. Differentiate Commit and Roll back.
6. What are set operations?
7. Define 1NF.
8. Expand BCNF
9. Define distributed transaction.
10. What is concurrency control?

PART – B (5 x 5 = 25)
Answer ALL the Questions

1) a) Explain about Entity Relationship Model
(Or)
b) Explain Constraints in Entity-Relationship model.

12) a) Describe the Select operation in relational algebra.
(Or)
b) Discuss DML of the database.

13) a) Write short notes on: Nested subqueries.
(Or)
b) Discuss briefly on Joined relations.

14) a) Write short notes of: First Normal form with example.
(Or)
b) Discuss the features of Good Relational Design.

15) a) Explain distributed query processing
(Or)
b) Explain distributed data storage

PART – C (3 x 10 = 30)
Answer any THREE Questions

16) Explain the concept of DDL and DML

17) Explain briefly on:
i) Tuple Relational calculus
ii) Domain Relational calculus

18) Explain Embedded SQL

19) Explain the Decomposition using Multivalued Dependencies.

20) Explain the Server System Architecture.

ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI

END SEMESTER EXAMINATIONS, JUNE - 2022

Time: 3 Hrs Max. Marks: 75

Subject: Database Management System **Subject Code: U8CC6002**

PART - A (10 X 2 = 20)
Answer ALL the Questions

1. Define Schema.
2. Define Super key
3. What is mean by scalar sub queries?
4. What is mean by Roll Back work?
5. Define Attribute
6. What is mean by weak entity set
7. What is mean by functional dependency?
8. What is mean by loseless decomposition
9. Define Storage Area Network.
10. What is mean by backup coordinator

PART - B (5 X 5 = 25)
Answer ALL the Questions

11. (a) Write short note on various types of data models

(Or)

(b) Give brief notes on Keys in database management system

12. (a) List out the basic data types available in SQL.

(Or)

(b) Write short note on Views.

13. (a) Write short note on Domain Relational Calculation.

(Or)

(b) Write short note on Mapping Cardinalities.

14. (a) Explain Boyce Codd Normal Form.

(Or)

(b) Explain Fourth normal form.

15. (a) Write short note on Interconnection networks.

(Or)

(b) Write short note on system structure in distributed transactions.

PART – C (3 X 10 = 30)
Answer any THREE Questions

16. Explain Database Design with example
17. Explain with example aggregate functions in SQL
18. Explain: The basic operations of Relational Algebra
19. Explain how decomposition is applied using multi valued dependencies.
20. Explain Server system architecture