



AI-1602

PGDCA

Term End Examination, 2020-21

RDBMS (ORACLE)

Paper : Fifth

Time Allowed : Three hours

Maximum Marks : 100

Minimum Pass Marks : 40

Note : Answer any two questions from each unit and question number 1 is compulsory.

1. Choose the correct answer of the following questions :

(a) Which of the following is not a component of DBMS :

- (i) Query processor
- (ii) Storage Manager

(iii) Task Manager
(iv) Data Storage

(b) Database structure is known as :

- (i) Database Architecture
- (ii) Schema
- (iii) Skelton
- (iv) Database format

(c) Which of the following refers to an entity in which the identifier of one entity includes the identifier of another entity :

- (i) Weak entity
- (ii) Strong Entity
- (iii) ID-dependent
- (iv) None of these

(d) Dynamic aspects related to a system are shown with the help of :

- (i) Sequence diagram
- (ii) Interaction diagram
- (iii) use-case diagram
- (iv) Deployment diagram

(e) Relational algebra is query language :

- (i) Relational
- (ii) Structural
- (iii) Procedural
- (iv) Non-procedural

(f) Join based on equality operator :

- (i) Natural join
- (ii) Equijoin
- (iii) Cartesian
- (iv) Outer Join

(g) To include integrity constraint in an existing relation use :

- (i) Create table
- (ii) Modify table
- (iii) Drop table
- (iv) Alter table

(h) 4NF is designed to cope with :

- (i) Transitive dependency
- (ii) Join dependency
- (iii) Multi valued dependency

(iv) Partial functional dependency

(i) Which normal form is considered as adequate for usual database design :

- (i) 2NF
- (ii) 3NF
- (iii) 4NF
- (iv) 5NF

(j) Which of the following is not a normalize form :

- (i) 1NF
- (ii) 3NF
- (iii) BCNF
- (iv) 2½NF

(k) Which type of statement are used to work on schema :

- (i) DML
- (ii) DCL
- (iii) DDL
- (iv) TCL

(l) Referential integrity is achieved by :

- (i) Primary key

- (ii) Foreign key
- (iii) Triggers
- (iv) Super key

(m) Triggers do not support in :

- (i) Delete
- (ii) Update
- (iii) View
- (iv) All the mentioned

(n) is a predicate that we expect the database to always satisfy :

- (i) Assertion
- (ii) Reason
- (iii) Mandate
- (iv) Verify

(o) Database users without technical knowledge are known as :

- (i) Naive user
- (ii) Ordinary user
- (iii) DBA
- (iv) Programmat

Unit-I

- 2. Draw the clear architecture of DBMS and define the role of each part.
- 3. What do you mean by distributed database? Explain its advantages.
- 4. What is relational database? Explain its features.

Unit-II

- 5. Explain the features of E-R model.
- 6. Explain use-case diagram of UML.
- 7. Create E-R diagram for examination system.

Unit-III

- 8. What is Join? Explain its types with example.
- 9. Write query for student entity with name, address, roll no. etc :
 - (a) Creation of student table with proper attribute
 - (b) Insert 5 records in the created table
 - (c) Display the name of student starting with 's'
 - (d) Delete the table
- 10. Explain nested query with suitable example.

Unit-IV

11. Why normalization is required? Justify.
12. Explain normalization process with suitable example.
13. Explain the following :
 - (a) Transitive dependency
 - (b) Functional dependency
 - (c) Database Anomalies

Unit-V

14. Write a short notes query processing.
15. Explain triggers with suitable example.
16. Write short notes on :
 - (a) Authorization in SQL
 - (b) Database recovery