

**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) Week 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 supported 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) Programmer

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 nexted query with suitable example.

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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