



AF-3131

**PGDCA (Part - I)**  
**Term End Examination, 2017-18**

## Paper - V

## Relational DBMS (Oracle)

*Time : Three Hours] [Maximum Marks : 100  
[Minimum Pass Marks : 40*

**Note :** Answer question No.1 which is compulsory and answer any **two** questions from each Unit. The figures in the right-hand margin indicate marks.

1. Choose the correct answer of the following questions : 2×15

(a) Which of the following are steps in query processing ?

- (i) Passing and translation
- (ii) Optimization
- (iii) Evaluation
- (iv) All of the above

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(b) A component of storage manager managing most critical part of database system is known to be :

- (i) Transaction manager
- (ii) File manager
- (iii) Authorization and integrity manager
- (iv) Buffer manager

(c) The relational model is concerned with :

- (i) Data structure and data integrity
- (ii) Data manipulation
- (iii) Both (i) and (ii)
- (iv) None of the above

(d) Which key provides the basic tuple-level addressing mechanism in a relational system ?

- (i) Candidate key
- (ii) Alternative key
- (iii) Primary key
- (iv) None of the above

(e) In a relational database a referential integrity constraint can be specified with the help of :

- (i) Primary key
- (ii) Foreign key

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- (iii) Secondary key
- (iv) All of the above

(f) ..... denote derived attributes.

- (i) Double ellipse
- (ii) Dashed ellipse
- (iii) Squared ellipse
- (iv) None of the above

(g) A ..... is an association between entities.

- (i) Relation
- (ii) Aggregation
- (iii) Generalization
- (iv) Specialization

(h) The function of a database is :

- (i) to check all input data
- (ii) to check all spelling
- (iii) to collect and organize input data
- (iv) to collect and organize users

(i) Large collection of files are called :

- (i) fields
- (ii) records
- (iii) database
- (iv) sectors

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- (j) SQL views can be used to hide :
  - (i) Columns and rows only
  - (ii) Complicated SQL syntax only
  - (iii) Both (i) and (ii)
  - (iv) None of the above
- (k) A relation is in this form if it is in BCNF and has no multivalued dependencies :
  - (i) Second normal form
  - (ii) Third normal form
  - (iii) Fourth normal form
  - (iv) First domain normal form
- (l) Which of the following is a group of one or more attributes that uniquely identifies a row ?
  - (i) Key
  - (ii) Determinant
  - (iii) Tuple
  - (iv) Relation
- (m) In the relational model, relationships between relations or tables are created by using :
  - (i) Composite keys
  - (ii) Determinants

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- (iii) Candidate keys
- (iv) Foreign keys

(n) A functional dependency is a relationship between or among :

- (i) tables
- (ii) rows
- (iii) relations
- (iv) attributes

(o) For some relations, changing the data can have undesirable consequences called :

- (i) referential integrity constraints
- (ii) Modification anomalies
- (iii) Normal forms
- (iv) Transitive dependencies

## **Unit-I**

- 2. Explain the relational data model with example. 7
- 3. Discuss the role of Database Administrator. 7
- 4. Discuss the various types of DBMS users. 7

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### **Unit-II**

5. Implement an ER-diagram for Hotel Management System.	7
6. Discuss primary and foreign key with example.	7
7. Discuss Specialization and Aggregation.	7

### **Unit-III**

8. Write a short note on Relational Algebra.	7
9. Discuss the various types of joins with suitable example.	7
10. Discuss GROUP BY and ORDER BY clause with suitable example.	7

### **Unit-IV**

11. Discuss functional dependency with example.	7
12. Explain 4NF and 5NF with example.	7
13. Write a short note on file organization for relational tables.	7

### **Unit-V**

14. Discuss security and recovery in RDBMS with suitable example.	7
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**15.** Write a short note on Referential Integrity. 7

**16.** Explain the role of query processor in any database. 7

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