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

(*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

(*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

(*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 indentifies 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

(*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

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

15. Write a short note on Referential Integrity. 7

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

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