

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

Relational DBMS (Oracle)

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.

- 403** _BSP_(7)

(Turn Over)

(2)

- (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

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| 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

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| 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

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| 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

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| 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

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| 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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