

PGDCA (New Course)
Term End Examination, 2016-17

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) SQL stands for :
- (i) Standard Query Language
 - (ii) Structured Query Language
 - (iii) Small Query Language
 - (iv) None of the above
- (b) What is a RDBMS terminology for a table ?
- (i) Domain

(2)

- (ii) Attribute
 - (iii) Relation
 - (iv) Tuple
- (c) The operation (denoted by $-$) allows us to find the types that are in one relation but are not in another.
- (i) Select
 - (ii) Project
 - (iii) Union
 - (iv) Set difference
- (d) The operation allows us to produce list of those attributes that we wish to see in the result (leaving other attributes).
- (i) Project
 - (ii) Set difference
 - (iii) Union
 - (iv) Addition
- (e) is a language that enables users to access or manipulate data as organised by appropriate data model.
- (i) DDL
 - (ii) DML

(3)

- (iii) TRL
 - (iv) None of the above
- (f) In E-R model represents set of relationship.
- (i) Rectangle
 - (ii) Ellipses
 - (iii) Diamonds
 - (iv) None of the above
- (g) is a language for specifying the data base schema as well as other properties of data.
- (i) DDL
 - (ii) DML
 - (iii) TRL
 - (iv) None of the above
- (h) A in a table represents among a set of value.
- (i) row, relationship
 - (ii) column, relationship
 - (iii) line, relationship
 - (iv) None of the above

(4)

(i) The attribute which can have a single value for a particular entity are called attributes.

(i) Multivalued

(ii) Single valued

(iii) Bi-valued

(iv) None of the above

(j) The value for attribute can be deemed from the values of other related attributes or entities.

(i) Multiple

(ii) Derived

(iii) Single

(iv) None of the above

(k) An entity set that has a primary key is termed as entity set.

(i) Weak

(ii) Strong

(iii) Medium

(iv) None of the above

(5)

(l) An entity set that does not have a primary key is termed as entity set.

(i) Weak

(ii) Strong

(iii) Medium

(iv) None of the above

(m) set is a collection of entities of same type.

(i) Relation

(ii) Entity

(iii) Attribute

(iv) Row

(n) is the result of taking a subset of a higher level entity set to form a lower level entity set.

(i) Specialization

(ii) Generalization

(iii) Union

(iv) None of the above

(6)

- (o) is the result of taking union of two or more disjoint (low level) entity sets to produce higher level entity set. The attributes of higher level entity sets are inherited by lower level entity sets.
- (i) Specialization
 - (ii) Generalization
 - (iii) Union
 - (iv) None of the above

Unit-I

- 2. What is the meaning of DBMS ? Explain the purpose behind using DBMS. 7
- 3. Explain DBMS architecture with the help of diagram. 7
- 4. Explain the types of database language. 7

Unit-II

- 5. Explain the weak and strong entities. 7
- 6. What is Aggregation ? Explain Generalization and Specialization. 7
- 7. Describe the mapping cardinalities. 7

Unit-III

- 8. Explain outer join and natural join. 7

(7)

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| 9. Discuss the use of INSERT, DELETE and UPDATE statements. | 7 |
| 10. Define primary key, alternate key and foreign key. | 7 |

Unit-IV

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| 11. Explain Boyce Codd Normal Form (BCNF). | 7 |
| 12. Discuss 1NF, 2NF and 3NF normal forms. | 7 |
| 13. Comment on Indexing. | 7 |

Unit-V

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| 14. Describe Triggers. | 7 |
| 15. Explain Query Processing. | 7 |
| 16. Explain authentication in SQL. | 7 |
