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SEAT No. \_\_\_\_\_

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## SARDAR PATEL UNIVERSITY

## T.Y. B.Sc. (Information Technology)) EXAMINATION, V SEM

Date : 22<sup>nd</sup> Oct 2018, Monday

Time : 10:00am To 01:00pm

Session : Morning

Sub: Relational Database Management System - I

Course No : US05CINT01

Total marks : 70

## Q - 1 Multiple Choice Question

[10]

- i) Entity is represented by \_\_\_\_\_.
  - a) Rectangle
  - b) Circle
  - c) Double lined Rectangle
  - d) Oval
- ii) Relationship between entities of the same set are called \_\_\_\_\_.
  - a) Bi Direction relationship
  - b) Binary Relationship
  - c) Self Relationship
  - d) Ternary Relationship
- iii) \_\_\_\_\_ SQL \* PLUS command used to execute last executed command.
  - a) Forwardslash(/)
  - b) Backslash(\)
  - c) ED
  - d) Get
- iv) Which of the following SQL operations demands the use of wild cards comparisons \_\_\_\_\_ ?
  - a) IN
  - b) Between
  - c) Exists
  - d) Like
- v) Which SQL statement is used to Add a new data in a database?
  - a) Add new
  - b) Insert new
  - c) Insert into
  - d) Add record
- vi) A \_\_\_\_\_ value can be inserted into the columns of any data type.
  - a) Null
  - b) Unique
  - c) Not Null
  - d) Index
- vii) For character data types the \_\_\_\_\_ sign matches any string.
  - a) \_
  - b) &
  - c) %
  - d) \$
- viii) The \_\_\_\_\_ function returns an integer value corresponding to the UserID of the user currently logged in.
  - a) ROWID
  - b) USER
  - c) UID
  - d) Rownum
- ix) \_\_\_\_\_ clause imposes a condition of the group by clause.
  - a) Group by
  - b) Sub query
  - c) Having
  - d) Where
- x) A sub query is also termed as \_\_\_\_\_ query.
  - a) View
  - b) index
  - c) Join
  - d) Nested

## Q - 2 Short Answer attempt any ten (Each carry 2 marks)

[20]

- i) Define : DBMS , RDBMS
- ii) Draw ER- Diagram for E-shopping system.
- iii) What is many to many relationship? Give one example.
- iv) List any two SQL \* .PLUS commands with example.
- v) Explain concept of DUAL table.
- vi) Explain order by clause.
- vii) What is column level constraint and Table level constraints.
- viii) Explain use of BETWEEN operators in concern with Range searching.
- ix) How UNIQUE and composite unique key can apply at table level?
- x) What is sub query? Why it is used for ?
- xi) List the types of indexes
- xii) How can be grant given on an object?

- Q - 3
- a) List out Codd rules and explain any six.
  - b) What is E-R diagram? Explain its notations

[06]

[04]

OR

- Q - 3 a) Define Normalization. Explain 1NF, 2NF and by taking suitable example.

[06]



C.P.T.O.)

- b) Explain types of Relationship. [04]
- Q - 4 a) Explain advantages and disadvantages of SQL. [06]  
b) Discuss pattern matching and range searching predicates in detail. [04]
- OR**
- Q - 4 a) Explain DDL and DML statements in detail. [06]  
b) Explain logical operators with example. [04]
- Q - 5 Explain Primary and Foreign key constraint with appropriate example. [10]
- OR**
- Q - 5 List all scalar functions available in SQL and explain any three main functions with example. [10]
- Q - 6 a) What is transaction processing ? Explain all TCL statements. [06]  
b) Explain Group by and Having Clause. [04]
- OR**
- Q - 6 a) What is index? Explain creation of Simple and Composite index. [06]  
b) Write syntax of grant & revoke explain any two object privileges. [04]

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(2)