SARDAR PATEL UNIVERSITY
M.Sc.(Information Technology) ; FIRST SEMESTER EXAMINATION
PS01CINT23 (RDBMS & Client Server Computing)
27ʰ October 2018, Saturday

Time: 10 AM To 1 PM   Marks: 70

Q1. **Give Answers of following Multiple Choice Questions.**   [08]

1 Which one of the following SQL commands is used to destroy a STUD table?
   (A) Destroy table stud;   (B)   Delete from stud;
   (C) Drop table stud;   (D)   None of given

2 _____ constraint establishes relationship between tables.

   A) Primary key   (B) Foreign key   (C) CHECK   (D) None of given

3 _____ Command is used to modify the values of a table.
   (A) Create   (B) Update   (C) Alter table   (D) None of given

4 Which one of the following commands is used to assign database object privileges?
   (A) Grant   (B)   Commit
   (C) Revoke   (D)   None of given

5 Fully Functional Dependency is associated with _____.
   (A) 2NF   (B)   3NF (C) 4NF   (D) None of given

6 In a _____ distributed database system, each database is of same kind.
   (A) client/server   (B)   homogeneous (C) heterogeneous (D) All of given

7 There is generally a _____ that listens for events.
   (A) Main loop (B) Callback function (C) event handler (D) None of given

8 _____ is a chart that visually represents the relationship between database entities.
   (A) Data flow diagram   (B) Database model diagram
   (C) entity model diagram   (D) None of given

Q2. **Answer the following questions: [Any SEVEN]**   [14]

1 Write a SQL command to make ENO as primary key to existing table EMP.

2 Define View and Sequence.

3 Differentiate clearly Trigger and Stored procedures.

4 Explain briefly types of joins.

5 What do you mean by concurrency control? How to handle it?

6 Distinguish between Procedural Programming & Event-driven Programming.

7 Define: Entity, Attribute, Relationship and Record.

8 List out operations on RDBMS.

9 Define: Heterogeneous services and Transparent gateway agents

Q3. A. What is RDBMS? Explain the Relational Data Model in detail. [6]

B. What is normalization? Explain it upto 2NF with example. [6]

OR

B. Explain ER-Diagram in brief. Draw the ER-diagram for University Database. [6]

Q4. A. Explain 2-tier & 3-tier client server architecture with diagrams. [6]

B. Explain Heterogeneous Distributed Database System with example. [6]

OR

B. What is event-driven programming? Explain how does event-driven programming work?. [6]

Q5. A. Write **SQL** commands for the following. (Any **THREE**) [6]

1 To create a table EMP having fields (ENO number(2,0), DNO number(1,0), varchar2(15), BPAY number(10,0)), where ENO is primary key and DNO is a foreign key referencing DEPTNO of table DEPT.

2 To display all the records of a table EMP whose ENAME has second character as B.

3 To Take back all the permission given on table EMP from user MEHTA.

4 To display DNO wise Total BPAY of table EMP.

B. Explain briefly basic structure of PL/SQL block. Also write the advantages of PL/SQL over SQL. [6]

OR

B. Explain following function with syntax and example: [6]

1. lower()   2. ceil()   3. substr()

Q6. A. Define the term Cursor and write the steps to manage explicit cursor. [6]

B. Write PL/SQL code block to read the ENO from user for the table EMP and search that record in table EMP. If record is found for that input ENO then display that employee information like ENO,ENAME and NPAY. If it is not found then display message like "For given ENO record does not exist in table EMP". [6]

OR

B. Write a Function named FMUL, which returns multiplication of two given numbers. Write a PL/SQL code block, which reads two numbers and using above function FMUL calculates multiplication of that two numbers and display the given numbers & the result. [6]

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