# SARDAR PATEL UNIVERSITY
## S.Y.B.C.A. SEMESTER – III (CBCS) EXAMINATIONS – 2019
### US03CBCA21: Database Management System – II
#### Tuesday, 19th November, 2019

Time: 2.00 PM to 5.00 PM

Max. Marks: 70

[10]

Q-1 Multiple Choice Questions.

1. Which of the following is not true?
   A. Normalization reduces duplication.
   B. Normalization reduces anomalies.
   C. Normalization is the process of designing the application programs.
   D. All of above.

2. Which of the following is not an anomaly?
   A. INDEX
   B. INSERT
   C. UPDATE
   D. DELETE

3. Boyce Codd Normal Form (BCNF) is needed when
   A. two non-key attributes are dependent
   B. there is more than one possible composite key
   C. there are two or more possible composite overlapping keys and one attribute of a composite key is dependent on an attribute of another composite key
   D. There are two possible keys and they are dependent on one another

4. The _____ section is compulsory in PL/SQL block.
   A. exception
   B. begin
   C. declare
   D. None of these

5. The _____ statement changes the flow of control within PL/SQL block.
   A. goto
   B. loop
   C. end loop
   D. repeat

6. _____ exception is raised when the data type or data size is invalid.
   A. program_error
   B. value_error
   C. type_invalid
   D. none of these

7. Data stored in a cursor is known as _____.
   A. implicit cursor
   B. active data set
   C. current data set
   D. none of these

8. We can pass parameter to procedure in how many ways?
   A. One
   B. Two
   C. Three
   D. Four

9. _____ type of parameter used to send values & get values from the stored procedures.
   A. IN
   B. OUT
   C. IN OUT
   D. none of above

10. _____ clause is valid only for row level trigger.
    A. when (con)
    B. INSERT
    C. UPDATE
    D. BEFORE

① (P.T.O.)

**Q-2    Attempt any ten.**                                                    **[20]**
1.   Write advantages of Normalization.
2.   List out codd's rules.
3.   Draw an Entity Relationship diagram of Library System.
4.   Draw and explain basic structure of PL/SQL in brief.
5.   Write disadvantages of SQL.
6.   Explain the use of EXIT WHEN in brief.
7.   Explain SELECT...INTO statement available in PL/SQL.
8.   List out explicit cursor attributes.
9.   Differentiate between Implicit cursor and explicit cursors.
10.  Differentiate: Database triggers and Procedures
11.  List and state use of trigger predicates.
12.  Write advantages of PL/SQL Package.

**Q-3**
**(A)**  Define Normalization. Explain 1$^{st}$ normal form, 2$^{nd}$ normal form and 3$^{rd}$ normal form in   **[7]**
         detail with appropriate example.
**(B)**  Explain Functional dependency with appropriate example.                 **[3]**

<div align="center">OR</div>

**Q-3**
**(A)**  List and explain consequences of poor database design with appropriate example.   **[7]**
**(B)**  List and explain types of relationships exist among entities.            **[3]**

**Q-4**
**(A)**  List and explain all types of if statement with syntax and example.      **[6]**
**(B)**  Explain %type and %rowtype attribute with appropriate example.           **[4]**

<div align="center">OR</div>

**Q-4**
**(A)**  Explain for loop and while loop with syntax and example.                 **[6]**
**(B)**  Explain Simple Case Expression with syntax and example.                  **[4]**

**Q-5**
**(A)**  Explain open, fetch and close statements for an explicit cursor with syntax and example.   **[6]**
**(B)**  Explain raise_application_error with syntax and appropriate example.     **[4]**

<div align="center">OR</div>

**Q-5**
**(A)**  Explain named exception and user defined exception in detail with appropriate example.   **[6]**
**(B)**  Explain cursor FOR LOOP with syntax and appropriate example.             **[4]**

**Q-6**  What is procedure and function? Explain procedure and function in detail with syntax and   **[10]**
         appropriate example.

<div align="center">OR</div>

**Q-6**  Define Trigger. List and explain types of trigger with syntax and appropriate example.   **[10]**

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<div align="center">②</div>