## PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

### **BSc DEGREE EXAMINATION MAY 2024**

(Fourth Semester)

### Branch - INFORMATION TECHNOLOGY

# RDBMS USING ORACLE / RELATIONAL DATABASE MANAGEMENT SYSTEM

|    |        | RELATIONAL DATABASE MANAGEMENT STOTEM                                                                                                                                                     |
|----|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7  | im     | e: Three Hours Maximum: 50 Marks                                                                                                                                                          |
|    |        | SECTION-A (5 Marks) Answer ALL questions ALL questions carry EQUAL marks (5 x 1 = 5)                                                                                                      |
| 1. |        | manages the allocation of space on disk storage and the data structures used to represent information stored on disk.  (i) Transaction Manager  (ii) File Manager  (iv) Integrity Manager |
| 2. |        | Minimal superkeys are called  (i) Primary Key  (ii) Foreign Key  (iii) Candidate Key  (iv) Composite Key                                                                                  |
| 3. |        | A multicolumn primary key is called  (i) Primary Key (ii) Foreign Key  (iii) Candidate Key (iv) Composite Key                                                                             |
| 4. |        | are masks placed upon tables that allows programmer to develop a method according to their desire.  (i) Index (ii) Views (iii) Sequence (iv) Grouping                                     |
| 5. |        | are procedures stored in the database and are implicitly executed when the contents of the table are changed?  (i) Functions  (ii) Procedures  (iii) Triggers  (iv) Stored functions      |
|    |        | SECTION - B (15 Marks)  Answer ALL Questions  ALL Questions Carry EQUAL Marks (5 x 3 = 15)                                                                                                |
| 6  | a      | Briefly explain about different functions of DBA.  OR                                                                                                                                     |
| 7  | b<br>a | Write short notes on various components of the Query Processor.  Mention various unary operations of Relational Algebra.                                                                  |
|    | b      | OR Examine in detail about Mapping Cardinalities.                                                                                                                                         |
| 8  |        | Outline about nested query in SQL statement.                                                                                                                                              |
| 9  | b<br>a | How will you create and drop index in a table?  OR                                                                                                                                        |
| 10 | b      | Summarise about PL/SQL Block Structure.                                                                                                                                                   |
| 10 | a      | Write a PL/SQL program to generate Electricity Bill.                                                                                                                                      |

b Narrate about creating and deleting trigger with an application.

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### SECTION -C (30 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks

 $(5 \times 6 = 30)$ 

11 a Explain in detail about Data Abstraction in the View of Data.

OR

- b Describe about Database Languages.
- 12 a Specify all the symbols used in the alternative E-R diagram notations.

OR

- b Describe in detail about BCNF.
- 13 a Summarise about Primary Key, Unique Key and Foreign key in Data Constraints.

OR

- b Discuss about any Eight oracle functions.
- 14 a Analyze about cursors in PL/SQL.

OR

- b Enumerate about Union, Intersect and Minus clause in SQL.
- 15 a Explain in detail about Database Triggers.

OF

b Discuss in detail about stored functions.

Z-Z-Z.

**END**