PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BBA DEGREE EXAMINATION DECEMBER 2023

(Fourth Semester)

Branch - BUSINESS ADMINISTRATION (INFORMATION SYSTEMS)

RELATIONAL DATABASE MANAGEMENT SYSTEMS

Time: Three Hours Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

 $(5 \times 1 = 5)$

- 1 Which is an example of a database model?
 - (i) Microsoft word

(ii) Relational model

(iii) Operating system

- (iv) Web browser
- 2 SQL function is used to find the total number of rows in a table?
 - (i) COUNT

(ii) SUM

(iii) AVG

- (iv) MAX
- 3 Which database object is used to provide an alternate name for a table or view?
 - (i) Synonym

(ii) Sequence

(iii)-View

- (iv) Index
- 4 Which data types are commonly used in PL / SQL for variable declaration?
 - (i) VARCHAR2, NUMBER, DATE
 - (ii) Object, Array, Set
 - (iii) XML, JSON, Text
 - (iv) Inheritance, Polymorphism, Encapsulation
- 5 What is the primary purpose of an "OUT" parameter in a stored procedure?
 - (i) To execute a transaction

(ii) To control access to data

(iii) To return a value to the calling program

(iv) To encapsulate code

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

 $(5 \times 3 = 15)$

a Define the structure of the database, including tables, constraints, and indexes?

OR

- b Discuss the primary purpose of Data Control Language (DCL) in SQL?
- 7 a What is the purpose of the SQL DISTINCT keyword in a SELECT statement?

OR

- b How SQL set operator combines the result sets of two SELECT statements, including duplicate rows?
- 8 a What is the purpose of a domain constraint in a database?

OR

b Write the purpose of an outer join and give a scenario where an outer join is more appropriate than an inner join.

9 a Define a PL / SQL block and discuss its structure.

OR

- b Explain the various data types available in PL/ SQL and their appropriate usuage.
- 10 a Describe how these subprograms can be grouped and organized using packages.

OR

b Discuss the different types of triggers with example.

SECTION -C (30 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks

 $(5 \times 6 = 30)$

11 a Explain the concepts of entities and attributes in a database.

OR

- b Detail the common data types in Oracle, including VARCHAR2, NUMBER, DATE, and more.
- 12 a Explain the role and use of aggregate functions in SQL, such as SUM, AVG, COUNT, MAX and MIN.

OR

- b Demonstrate how to combine the result sets of two SELECT statements using the UNION operator.
- 13 a Explain how referential constraints, also known as foreign keys, are implemented in a relational database.

OR

- b Discuss the role of subqueries in SQL and provide an example of a situation where a subquery is necessary.
- 14 a Explain the concept of an Object Oriented Relational Database Management System (OORDBMS).

OR

- b Explain the various data types available in PL/ SQL and their appropriate usage.
- 15 a Discuss the role of stored procedures, their use of parameters (IN, OUT, IN-OUT)

OR

b Explore the concept of "INSTEAD OF" triggers and explain when they are commonly used.

END