

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BCA DEGREE EXAMINATION DECEMBER 2024
(Third Semester)**

Branch – **COMPUTER APPLICATIONS**

RELATIONAL DATABASE MANAGEMENT SYSTEMS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	What is RDBMS? (i) Database that stores data elements that are not linked (ii) Database that accesses data elements that are not linked (iii) Database that stores and allows access to data elements that are linked (iv) None of the above	K1	CO1
	2	Extend your understanding of transaction management by identifying the correct statement that makes updates permanent (i) Finalize work (ii) Finish work (iii) Commit work (iv) None of the mentioned	K2	CO1
2	3	What does a directed line (→) from a relationship set to two entity sets means? (i) One-one (ii) Many-one (iii) Many-many (iv) One-many	K1	CO2
	4	Show which command is used to change the data in a table? (i) Append (ii) Alter (iii) Update (iv) Browse	K2	CO2
3	5	The join operations that do not retain mismatched tuples are called as ----- operations. (i) Outer join (ii) natural join (iii) Full outer join (iv) inner join	K1	CO3
	6	Extend your understanding of normalization by identifying which forms are based on functional dependency. (i) 1NF (ii) 2NF (iii) 3NF (iv) 4NF	K2	CO3
4	7	How many primary keys can be in a table? (i) Only 1 (ii) Only 2 (iii) Depends on number of columns (iv) Depends on DBA	K1	CO4
	8	Rephrase the statement: SQL views are also known as ----- (i) Simple table (ii) Virtual table (iii) Complex table (iv) Actual table	K2	CO4
5	9	The SQL/PSM stands for (i) SQL/Policy Standard modules (ii) SQL/Persistent Stored Modules (iii) SQL/Policies Stored Modules (iv) SQL/Priority Standard Modules	K1	CO5
	10	Rephrase the statement: Web interface also known as ----- (i) Web UI (ii) Web GUI (iii) Google Interface (iv) Web users	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Infer the purpose of Database systems.	K2	CO1
	(OR)			
	11.b.	Interpret the ACID properties of a transaction management and explain their significance .		
2	12.a.	Build the overview of design process in database design.	K3	CO2
	(OR)			
	12.b.	Develop an ER-diagram for a company's HR database with example.		
3	13.a.	Build a query using SELECT and PROJECT operation with suitable example.	K3	CO3
	(OR)			
	13.b.	Develop and demonstrate second and third normal forms with suitable example.		
4	14.a.	Examine and categorize basic SQL queries.	K4	CO4
	(OR)			
	14.b.	Compare and contrast the different types of views in SQL.		
5	15.a.	Analyze and outline the key aspects of database programming in SQL.	K4	CO5
	(OR)			
	15.b.	Examine the concept of database stored procedures in SOL.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Analyze and illustrate the database architecture with neat diagram.	K4	CO1
2	17	Examine and analyze different notations used for modelling data in RDBMS and highlight its advantages and limitations.	K4	CO2
3	18	Classify and analyze the different types of normal forms in RDBMS, providing examples.	K4	CO3
4	19	Examine and categorize the different types of triggers in a database with suitable example.	K4	CO4
5	20	Compare and contrast Embedded SQL, Dynamic SQL, and SQLJ, analyzing their features and providing examples.	K4	CO5

Z-Z-Z

END