

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2024
(Third Semester)

Branch - MATHEMATICS WITH COMPUTER APPLICATIONS

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 the term used to refer to a row? a) Attribute b) Tuple c) Field d) Instance	K1	CO1
	2	Statement 1: A tuple is a row in a relation Statement 2: Existence of multiple foreign keys in a same relation is possible which one of the following is correct? a) Both the statements are true b) Statement 1 is correct but Statement 2 is false c) Statement 1 is false but Statement 2 is correct d) Both the statements are false	K2	CO1
2	3	Which of the following is NOT a valid keyword in SQL? a) SELECT b) DELETE c) WHERE d) INCLUDE	K1	CO2
	4	The _____ clause allows us to select only those rows in the result relation of the _____ clause that satisfy a specified predicate. a) Where, from b) From, select c) Select, from d) From, where	K2	CO2
3	5	Which of the following tasks CANNOT be accomplished using SQL? a) Creating and modifying database structures b) Writing complex algorithms for data analysis c) Retrieving specific data from a database d) Adding new data to a database	K1	CO3
	6	The SQL LIKE operator is used in which of the following clause? a) Having b) Select c) Where d) Group by	K2	CO3
4	7	In which of the following formats data is stored in the database management system? a) Image b) Text c) Table d) Graph	K1	CO4
	8	Find which of the following is not a feature of DBMS? a) Minimum Duplication and Redundancy of Data b) High Level of Security c) Single-user Access only d) Support ACID Property	K2	CO4
5	9	The DBMS acts as an interface between _____ and _____ of an enterprise-class system. a) Data and the DBMS b) Application and SQL c) Database application and the database d) The user and the software	K1	CO5
	10	Which of the following set should be associated with weak entity set for weak entity to be meaningful? a) Neighbour set b) Strong entity set c) Owner set d) Identifying set	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.	Identify different Database Languages.	K3	CO1
	(OR)			
	11.b.	Construct the architecture of the Database Structure.		
2	12.a.	List out the types of SQL statements.	K4	CO2
	(OR)			
	12.b.	Categorize the basic SQL operations.		
3	13.a.	Design a Database with the application of NULL values with example.	K6	CO3
	(OR)			
	13.b.	Build different nested sub queries used in SQL for a STUDENT Database.		
4	14.a.	Compare different types of schemes used to create a Database.	K4	CO4
	(OR)			
	14.b.	Examine the JOIN expression used in SQL.		
5	15.a.	Analyze an Entity Relationship Model for a STUDENT Database.	K4	CO5
	(OR)			
	15.b.	Distinguish the strong and weak entity set from any one of the Database as per your interest.		

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	Identify the different views of data in DBMS.	K3	CO1
2	17	Inference about the SET operations used in SQL queries.	K4	CO2
3	18	Create a Database by applying various ways of modifications in it.	K6	CO3
4	19	Classify different KEY CONSTRAINTS needed for the Database administration.	K4	CO4
5	20	Discover an E-R Model by using all the symbols for a STUDENT Database.	K4	CO5

Z-Z-Z END