

PSG COLLEGE OF ARTS AND SCIENCE  
(AUTONOMOUS)  
MCA DEGREE EXAMINATION DECEMBER 2023  
(First Semester)

Branch- COMPUTER APPLICATIONS

HYBRID DATABASE MANAGEMENT SYSTEM

Time : Three Hours

Maximum : 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1=10)

Module No.	Question No.	Question	K Level	CO
1	1	What is a database? a) Organized collection of information that cannot be accessed, updated, and managed b) Collection of data or information without organizing c) Organized collection of data or information that can be accessed, updated, and managed d) Organized collection of data that cannot be updated	K1	CO1
	2	Which type of data can be stored in the database? a) Image oriented data b) Text, files containing data c) Data in the form of audio or video d) All of the above	K1	CO1
2	3	In which of the following formats data is stored in the database management system? a) Image      b) Text                      c) Table                      d) Graph	K1	CO1
	4	Which of the following is not a type of database? a) Hierarchical                      b) Network c) Distributed                      d) Decentralized	K1	CO1
3	5	Which of the following is a feature of the database? a) No-backup for the data stored      b) User interface provided c) Lack of Authentication      d) Store data in multiple locations	K4	CO2
	6	Which of the following is not a function of the database? a) Managing stored data              b) Manipulating data c) Security for stored data              d) Analysing code	K1	CO1
4	7	Which forms have a relation that contains information about a single entity? a) 4NF              b) 2NF              c) 5NF              d) 3NF	K1	CO1
	8	_____ operations do not preserve non-matched tuples. a) Left outer join                      b) Inner join c) Natural join                      d) Right outer join	K1	CO1

Cont...

5	9	The traditional storage of data organized by the customer, stored in separate folders in filing cabinets is an example of _____ type of 'database' management system. a) Object-oriented database management system b) Relational database management system c) Network database management system d) Hierarchical database management system	K1	CO1
	10	_____ resembles Create view. a) Create table . . . as b) Create view as c) Create table . . .like d) With data	K3	CO3

**SECTION -B (35 Marks)**Answer **ALL** questions**ALL** questions carry **EQUAL** Marks

(5 x 7 = 35)

MODULE No.	Question No.	Question	K level	CO
1	11.a.	Analyze the history of Database systems.	K4	CO1
		(OR)		
	11.b.	Classify the Entity relationship model with illustrations.		
2	12.a.	Interpret the Join queries with example.	K5	CO2
		(OR)		
	12.b.	Explain the different triggers with example.		
3	13.a.	Discuss the role of a CMS database in big data management.	K6	CO3
		(OR)		
	13.b.	Discuss the Key Value pair databases into a big environment.		
4	14.a.	Discuss the Mongoddb's core server and tools in details.	K4	CO4
		(OR)		
	14.b.	Inspect how to creating and querying with indexes in Mongoddb.		
5	15.a.	Explain the principles of Schema design with example.	K5	CO5
		(OR)		
	15.b.	Criticize the Aggregation framework with example.		

**SECTION -C(30 Marks)**Answer **ANY THREE** questions**ALL** questions carry **EQUAL** Marks

(3 x 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Analyze the structure of relational databases.	K4	CO1
2	17	Examine the Normalization with illustrations.	K4	CO2
3	18	Explain in detail the integrating data types into a big data environment.	K5	CO3
4	19	Discuss the use cases and production deployment in Mongoddb.	K6	CO4
5	20	Criticize the Collections and documents of database with example.	K5	CO5

Z-Z-Z END