M.Sc. II Semester Degree Examination, September/October - 2022
COMPUTER SCIENCE
21CSC2C5L (DSC5) : Database Management System

Time : 3 Hours   Maximum Marks : 70

Instruction : *Answer **any five** of the following with question no.**1 compulsory**.*

1.	(a)	What is DBMS ? List and explain the characteristics of DBMS.	7
	(b)	Illustrate the concept of Data Modeling for a database.	7
2.	(a)	Illustrate the different types of file organization in DBMS.	7
	(b)	Explain various types of secondary storage devices used to store database.	7
3.	(a)	Demonstrate different types of normal forms with an example.	7
	(b)	Demonstrate various unary operations in relational algebra.	7
4.	(a)	Enlist and explain the desirable properties of transaction.	7
	(b)	Explain the transaction processing in DBMS.	7
5.	(a)	Discuss on shadow paging technique in database recovery technique.	7
	(b)	Describe ARIES recovery algorithm.	7
6.	(a)	Explain various operations carried in file.	7
	(b)	Explain the embedded SQL in detail.	7
7.	(a)	Summarize the locking techniques in DBMS.	7
	(b)	List and explain different types of schedule techniques in DBMS.	7
8.		Write short notes for the following :	
	(i)	Single level ordered index	5
	(ii)	Aromatics in DBMS	5
	(iii)	Serializability of schedules	4

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