Total No. of Questions: 3

Enrollment No. EN21CS304039

Faculty of Engineering

Mid Sem I Examination March - 2023

CS3CO39 Database Management System

Programme: B.Tech. Branch/Specialisation: CSE

Duration: 1.5 Hrs. **Maximum Marks: 30**

			Marks	BL	CO	PO	PSO
Q.1	i.	Who created the first DBMS? a) Edgar Frank Codd b) Charles Bachman c) Charles Babbage d) Sharon B. Codd	1	BL1	CO1	PO1	
	ii.	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	1	BL2	CO1	PO1	
	iii.	Which of the following is not a type of database? a) Hierarchical b) Network c) Distributed d) Decentralized	1	BL2	CO1	PO1	
	iv.	Which of the following is used to denote the selection operation in relational algebra? a) Pi (Greek) b) Sigma (Greek) c) Lambda (Greek) d) Omega (Greek)	1	BL1	CO2	PO1	

	v.	Which is a join condition contains an equality operator: a) Equijoins b) Cartesian c) Natural d) Left	1	BL1	CO2	PO3
	vi.	Which is a unary operation: a) Selection operation b) Primitive operation c) Projection operation d) Generalized selection	1	BL1	CO2	PO1
Q.2	i.	Write any four differences between the data and information.	2	BL4	CO1	PO2
	ii.	Explain the two tier and three tier architecture of DBMS in detail with a suitable diagram.	4	BL4	CO1	PO3
	iii.	Write any six differences between conventional file systems and database management systems.	6	BL5	CO1	PO2
OR	iv.	Explain entity relationship model in detail with suitable examples.	6	BL6	CO1	PO3
Q.3	i.	Define the relational algebra.Also write the types of operations of relational algebra.	2	BL4	CO2	PO2
	ii.	Explain the inner join and its types in detail with examples.	4	BL4	CO2	PO2
	iii.	Explain the SQL.Also explain the languages of SQL (DDL, DML, DCL) in detail with examples.	6	BL6	CO2	PO3
OR	iv.	Explain the basic operations of relational algebra with examples.	6	BL4	CO2	PO2

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3+2+2+
5+2+3
+5