S.E. (IT) (S em-III) (CBCGS) (R-19) 92776
(C Scheme)

Database Management System

University of Mumbai
Examination Summer 2022

Time: 2hour 30 minutes   Max. Marks: 80

===

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	Which of the following is true in DBMS
Option A:	Mechanism to copy data
Option B:	Mechanism to copy and managed data.
Option C:	Mechanism to store and manage data
Option D:	Mechanism to paste data.
2.	Weak Entity set
Option A:	Do not have sufficient attributes
Option B:	Do not have any rrelation.
Option C:	Do not have sufficient attributes to form primary key
Option D:	Do not have attributes at all
3.	In E-R notations relationship reprinted as
Option A:	eclipse
Option B:	diamond
Option C:	triangle
Option D:	circle
4.	Which of the following is correct syntax to display all employee from employee table using SQL
Option A:	Select & from employee
Option B:	Select * from employee
Option C:	Select * from department
Option D:	Select nothing
5.	Which SQL command use to sort the data in ascending or descending order
Option A:	Group by
Option B:	Order by
Option C:	having
Option D:	Not having
6.	Which of the following provides the ability to query information from the database and insert tuples into, delete tuples from. and modify tuples in the database?
Option A:	DDL
Option B:	DCL
Option C:	DML
Option D:	Entity
7.	The Projection operation in relational algebra is written as
Option A:	Σ
Option B:	P
Option C:	Π
Option D:	Σ
8.	Deletion of an student from table also deletes that student from another table. This kind of delete is called
Option A:	cascaded

Option B:	virtual
Option C:	related
Option D:	Simple
9.	Which one of the following is not a part of ACID Properties of database transactions
Option A:	Atomicity
Option B:	Consistency
Option C:	Isolation
Option D:	Deadlock
10.	A Transaction complete its execution is said to be
Option A:	Saved
Option B:	Loaded
Option C:	rolled
Option D:	committed

Q2	Solve any Two Questions out of Three 10 marks each
A	Explain the DDL and DML with suitable Examples
B	Explain all E-R Notations with examples.
C	Explain relational algebra operations in details.

Q3	Solve any Two Questions out of Three 10 marks each
A	Draw E-R diagram for Hospital Management System
B	Explain deadlock with respect to database transactions. Also discuss deadlock handling.
C	Explain database architecture in detail.

Q4	
A	Solve any Two 5 marks each
i.	Compare traditional file system with database management system.
ii.	Explain Log based recovery in transaction management
iii.	Explain the role of primary key and foreign key in DBMS.
B	Solve any One 10 marks each
i.	Explain any five SQL aggregate functions with examples
ii.	Explain ACID Properties in Details.