## 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 SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	
Option B:	diamond	
Option C:	triangle UNANANANANANANANANANANANANANANANANANANA	
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	
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5. 8 8	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	
0,0,7,0,0,0,0		
6.7	Which of the following provides the ability to query information from the database and	
Option A:	insert tuples into, delete tuples from, and modify tuples in the database?	
Option B:	DCL	
Option C:	DML	
Option C.	Entity	
Option D.		
7.	The Projection operation in relational algebra is written as	
Option A:	$\Sigma$	
Option B:	P	
Option C:		
Option D:		
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8.	Deletion of an student from table also deletes that student from another table. This kind of delete is called	
Option A:	cascaded	
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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
В	Explain all E-R Notations with examples.
С	Explain relational algebra operations in details.
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Q3	Solve any Two Questions out of Three 10 marks each	
A Draw E-R diagram for Hospital Management System		
В	Explain deadlock with respect to database transactions. Also discuss deadlock handling.	
C	Explain database architecture in detail.	

Q4			
ANDO	Solve any Two	5 marks each	
	Compare traditional file system with database management system.		
\$ <b>ii</b> . O \$ 5	Explain Log based recovery in transaction management		
	Explain the role of primary key and foreign key in DBMS.		
B	Solve any One	10 marks each	
	Explain any five SQL aggregate functions with examples		
T P S S S IL S S S	Explain ACID Properties in Details.		