Examinations Commencing from 17th May 2022 to _31st May 2021_____

Program: **Computer Engineering**

Curriculum Scheme: Rev2016

Examination: TE Semester: VI

Course Code: **CSDLO6022**   and   Course Name: **Advance Database System**

Time: 2 hour 30 minutes   Max. Marks: 80

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Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	B tree eliminates the redundant storage of
Option A:	bucket skew
Option B:	indices
Option C:	bucket
Option D:	search keys
2.	The real use of the Two-phase commit protocol is _____
Option A:	Atomicity, i.e, all-or-nothing commits at all sites
Option B:	Deadlock will not occur
Option C:	Availability
Option D:	Concurrency control can be avoided
3.	The concepts which checks the syntax of the query is
Option A:	query graph
Option B:	optimizer
Option C:	query tree
Option D:	parser
4.	This is not the step of Query Processing
Option A:	Query Decomposition

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Option B:	Query Optimization
Option C:	Runtime code creation
Option D:	Runtime Query Execution
5.	Which of the following is NOT a valid access control mechanism?
Option A:	SAC (Subjective Access Control) list
Option B:	DAC (Discretionary Access Control) list
Option C:	RBAC (Role Based Access Control) list
Option D:	MAC (Mandatory Access Control) list
6.	MIME type of JSON is
Option A:	application/json
Option B:	application/x-json
Option C:	text/json
Option D:	application/javascript
7.	The nonleaf nodes of B+ tree structure form a
Option A:	Multilevel clustered indices
Option B:	Sparse indices
Option C:	Multilevel dense indices
Option D:	Multilevel sparse indices
8.	The grants privileges on SQL authorization mechanism doesn't have
Option A:	Specified attributes
Option B:	Specified tuples Entire relation
Option C:	Specific values of attribute
Option D:	Entire relation

9.	Which of the following parallel database architectures is/are mainly used by distributed database system?
Option A:	Shared Memory
Option B:	Shared Disk
Option C:	Shared Nothing
Option D:	Hierarchical
10.	_____ are the indices that store the values of some attributes along with the pointers to the record.
Option A:	Binary indices
Option B:	Covering indices
Option C:	Key indices
Option D:	Static indices

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Question 2	Solve any Two out of Three	10 marks each
A	Explain concept of hashing and its type.	
B	Explain Merge join with its working, cost calculation and example.	
C	What are the steps of Query Processing? Explain each step in detail	

Question 3	Solve any Two out of Three	10 marks each
A	List various fragmentation strategies in a distributed database and explain any one in detail.	
B	What are the types of Spatial Data and types of Spatial Queries? Explain.	
C	Explain what do mean by database privileges and enlist the database privileges with suitable example.	

Question 4	Solve any Four Questions out of Six	5 marks each
A	Explain Multilevel Index with diagram.	
B	What are the steps involved in query processing? Why queries are to be optimized?	
C	What are the components of distributed database? Explain each component with block diagram.	
D	What are the Schemes of replication? Explain each scheme with advantages and disadvantages.	
E	What is the differences Between ODBMS, RDBMS and ORDBMS?	
F	Write short note on Mobile Databases.	