University of Mumbai

Examination 2020 under cluster 8 (PHCET)

Program: TE Computer Engineering
Curriculum Scheme: 2016
Examination: Third Year Semester VI
Course Code: CSDLO6022 and Course Name: Advanced Database Management System

Time: 1 hour   Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	In ordered indices the file containing the records is sequentially ordered, a _____ is an index whose search key also defines the sequential order of the file.
Option A:	Clustered index
Option B:	Structured index
Option C:	Unstructured index
Option D:	Non clustered index
Q2.	Global Wait-for graph is used for _____ in Distributed database.
Option A:	handling network
Option B:	Handling deadlock
Option C:	Handling failures
Option D:	Handling concurrency control
Q3.	A collection and a document in MongoDB is equivalent to............. concepts respectively.
Option A:	Database and Table
Option B:	Table and Column
Option C:	Column and Row
Option D:	Table and Row
Q4.	Some of the columns of a relation are at different site is
Option A:	Vertical Partitioning
Option B:	Data Replication
Option C:	Horizontal and Vertical Partitioning
Option D:	Horizontal Partitioning
Q5.	The index which has an entry for some of the key value is classified as
Option A:	non dense index
Option B:	Linear index
Option C:	Dense index
Option D:	Clusture index
Q6.	Immediate Update and Deferred Update are two methods for
Option A:	maintaining transaction logs.
Option B:	updating table
Option C:	changing the logs
Option D:	update a row

Q7.	What is not true about JSON
Option A:	JSON is a lightweight data-interchange format
Option B:	JSON is "self-describing" and easy to understand
Option C:	JSON is language independent
Option D:	JSON is a database
Q8.	The non leaf nodes of B+ tree form a__
Option A:	Multilevel clustured indices
Option B:	Sparse indices
Option C:	Multilevel dense indices
Option D:	Multilevel Sparse indices
Q9.	Company X is planning to implement rule based access control mechanism for controlling access to its information assets, what type of access control is this usually related to?
Option A:	Discretionary Access Control
Option B:	Subject-dependent Access Control
Option C:	MAC (Mandatory Access Control) list
Option D:	Task-initiated Access Control
Q10.	Which of the following is a disadvantage of replication?
Option A:	Reduced network traffic
Option B:	If the database fails at one site, a copy can be located at another site.
Option C:	Each site must have the same storage capacity.
Option D:	Each transaction may proceed without coordination across the network.
Q11.	When we update any tuple in the relation which Authorization on a relation allows a user to?
Option A:	select authorization
Option B:	update authorization
Option C:	grant authorization
Option D:	define authorization
Q12.	Each relational algebra expression represents a sequence of
Option A:	Opearators
Option B:	Differentials
Option C:	Parameters
Option D:	Routines
Q13.	Which of the following transaction processing properties ensures once a transaction completes successfully (commits), the updates survive even if there is a system failure?
Option A:	Durability
Option B:	Atomicity
Option C:	Isolation
Option D:	Consistency
Q14.	Hash indices are based on a range of bucket values,which is determined by a

	function,called a___
Option A:	Ordering function
Option B:	Index function
Option C:	Hash function
Option D:	Table function
Q15.	A problem encountered in multitasking when a process is perpetually denied necessary resources is called _____
Option A:	Deadlock
Option B:	Starvation
Option C:	Inversion
Option D:	Aging
Q16.	The mostly wide structure used for indexing is
Option A:	B+ tree structure
Option B:	balanced tree structure
Option C:	unbalanced tree structure
Option D:	Sequential tree structure
Q17.	Temporal Data is generally used in Real-time systems, for example,
Option A:	Railway Seat Reservation
Option B:	Sensex
Option C:	Weather forecasting
Option D:	social media
Q18.	A deadlock eventually cripples system throughput and will cause the CPU utilization to _____
Option A:	Increase
Option B:	Drop
Option C:	Stay still
Option D:	Gradually increase
Q19.	In case of A4 search algorithm, if the equality condition is on a key,the strategy can retrieve__
Option A:	Single records
Option B:	Multiple records
Option C:	Two records
Option D:	No records
Q20.	Time in Temporal data model is___
Option A:	Multi dimentional
Option B:	Bi directional
Option C:	Multi dimentional
Option D:	Three dimentional
Q21.	In JSON, values can not be of which data types
Option A:	String
Option B:	Number

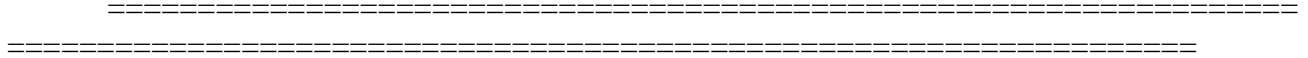|	
Option C:	Null
Option D:	Fractional number
Q22.	In the query evaluation plan,the response time is merely dependent on the contents of the__
Option A:	Queue
Option B:	Disk
Option C:	Buffer
Option D:	Pipeline
Q23.	Absolute Validity in temporal database is
Option A:	makes sure that there must be some consistency in the real data and the data stored in the database.
Option B:	makes sure that there must be full consistency in the real data and the data stored in the database.
Option C:	makes sure that there must be some inconsistency in the real data and the data stored in the database.
Option D:	makes sure that there must be full consistency in the real data and the data stored in the database.
Q24.	A transaction can do only read operation and not write operation on a data item when it acquires ……. lock.
Option A:	Read mode
Option B:	Exclusive mode
Option C:	Shared mode
Option D:	Write mode
Q25.	The most commonly used algorithm technique for external sorting is known as
Option A:	Sort and Merge
Option B:	External sort and merge
Option C:	External Merge
Option D:	External runnable merge

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Question	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	A
Q2.	B
Q3.	D
Q4	A
Q5	A
Q6	A
Q7	D
Q8.	D
Q9.	A
Q10.	C
Q11.	B
Q12.	A
Q13.	A
Q14.	C
Q15.	B
Q16.	A
Q17.	A
Q18.	B
Q19.	A
Q20.	A
Q21.	D
Q22.	C
Q23.	A
Q24.	C
Q25.	B