

Program: Computer Engineering  
Curriculum Scheme: 2012  
Examination TE Semester VI

Course Code: CPC603 and Course Name: Distributed Databases

Time: 2 hour

Max. Marks: 80

<b>Q1.</b>	<b>Choose the correct option for following questions.</b>	<b>Total : 40 Marks</b>
	<b>All the Questions are compulsory and carry equal marks</b>	
1.	distributed database has which of the following advantages over a centralized database?	
Option A:	Software cost	
Option B:	Software complexity	
Option C:	Slow Response	
Option D:	Modular Growth	
2.	In DDB local communication cost is	
Option A:	Calculated	
Option B:	Achieved	
Option C:	Increased	
Option D:	Minimized	
3.	If a relation contains a small number of tuples and not updated frequently then is better to go for _____	
Option A:	Horizontal Fragmentation	
Option B:	Vertical Fragmentation	
Option C:	Mixed Fragmentation	
Option D:	No Fragmentation	
4.	When transaction $T_i$ requests a data item currently held by $T_j$ , $T_i$ is allowed to wait only if it has a timestamp smaller than that of $T_j$ (that is, $T_i$ is older than $T_j$ ). Otherwise, $T_i$ is rolled back (dies). This is	
Option A:	Wait-die	
Option B:	Wait-wound	
Option C:	Wound-wait	
Option D:	Wait	
5.	Completeness is desirable in horizontal fragmentation because _____	
Option A:	It balanced load across all the resulting fragments	
Option B:	it unbalanced load across all the resulting fragments	
Option C:	it balanced the usage across all the resulting fragments	
Option D:	it unbalanced the usage across all the resulting fragments.	
6.	In vertical fragmentation "affinity" to understand	
Option A:	Independent	
Option B:	Separate	
Option C:	Togetherness	

Option D:	Mixed
7.	If one site ABORTs while processing part of a distributed transaction t, all other sites processing part of t will also ABORT t. Which of the following ensures this?
Option A:	Two phase locking protocol
Option B:	Two phase commit protocol
Option C:	Three phase locking protocol
Option D:	Three phase commit protocol
8.	Query optimization is choosing the most efficient _____ strategy from multiple alternative for query processing
Option A:	Execution
Option B:	Analysing
Option C:	cost effective
Option D:	load balancing
9.	In system R Algorithm which method is used to join the relations
Option A:	nested table
Option B:	nested loop
Option C:	outer join
Option D:	equi join
10.	In Iterative N-ary integration naming conflicts
Option A:	synonyms,homonyms
Option B:	synonyms,anonymous
Option C:	homonmymys,anonymous
Option D:	Synonymous
11.	Which of the following issues occurs due to Autonomy in query processing in heterogeneous distributed databases
Option A:	Load autonomy
Option B:	Communication autonomy
Option C:	Distribution autonomy
Option D:	Storage autonomy
12.	A heterogeneous database system is a integration of
Option A:	heterogeneous , disparate databases
Option B:	homogeneous, disparate databases
Option C:	separate databases
Option D:	homogeneous, sepatare databases
13.	DTD stands for
Option A:	Division to definition
Option B:	Document type definition
Option C:	Data type division
Option D:	data type document
14.	W3C supports an XML based alternative to DTD, called
Option A:	XML Schema
Option B:	HTML DOM

Option C:	XML Parser
Option D:	XML Query
15.	XSL definition is used along with XML definition to specify
Option A:	The data types of the contents of XML document
Option B:	The presentation of XML document
Option C:	The links with other documents
Option D:	The structure of XML document
16.	Distributed deadlock detection is
Option A:	Chandy –Misra-Haas algorithm
Option B:	Centralized deadlock detection algorithm
Option C:	Hierarchical deadlock detection algorithm
Option D:	Wait for graph algorithm
17.	In Pre integration the designer uses common approach as _____
Option A:	Extractor
Option B:	Transformer
Option C:	Ladder
Option D:	Loader
18.	#PCDATA is_
Option A:	Parsed character data
Option B:	Parsed component data
Option C:	Partial character data
Option D:	Partial component data
19.	In pessimistic concurrency control technique V stands for
Option A:	Veracity
Option B:	Value
Option C:	Validate
Option D:	Volume
20.	XML deals with storage and _____ of data
Option A:	Transport
Option B:	Minify
Option C:	Design
Option D:	Filter

<b>Q2</b>	<b>Solve any Two Questions out of Three</b>	<b>10 marks each</b>
1	Write a short note on 2PC recovery protocols	
2	Explain Heterogeneous databases	
3	What is DDBMS? Explain the advantages of DDBMS	

<b>Q3</b>	<b>Solve any Two Questions out of Three</b>	<b>10 marks each</b>
1	Explain any two transparencies in DDBMS.	
2	Write a short note on Deadlock detection in Distributed Databases.	
3	Explain R* Algorithm in detail.	