Sample Questions

Computer Engineering

Subject Name: Distributed Computing **Semester: VIII**

Multiple Choice Questions

Choose the correct option for following questions. All the Questions carry equal marks	
1.	**_____ and _____ are used to hide the access and location of the system.**
Option A:	**access transparency, location transparency.**
Option B:	migration transparency, replication transparency
Option C:	network transparency, location transparency
Option D:	failure transparency, network transparency
2.	**The two popular remote object invocation models are**
Option A:	RPC and RMI
Option B:	**CORBA and RMI**
Option C:	MOM and RPC
Option D:	MPI and MOM
3.	**In distributed systems, a logical clock is associated with _____**
Option A:	each instruction
Option B:	each register
Option C:	**each process**
Option D:	none of the mentioned
4.	**Process transfer policy in Load-balancing algorithms is_____**
Option A:	Determines how to exchange load information among nodes
Option B:	Determines to which node the transferable process should be sent
Option C:	Determines the total number of times a process can migrate
Option D:	**Determines whether to execute a process locally or remotely**

5.	**Client centric consistency model useful in applications where_____**
Option A:	Data is static
Option B:	**One client always updates data store**
Option C:	Data updation is not required
Option D:	Data storage is not required
6.	**In distributed file system, file name does not reveal the file's _____**
Option A:	Local name
Option B:	Global name
Option C:	Cache location
Option D:	**Physical storage location**
7.	**The Ricart & Agrawala distributed mutual exclusion algorithm is:**

Option A:	More efficient and more fault tolerant than a centralized algorithm.
Option B:	More efficient but less fault tolerant than a centralized algorithm.
Option C:	Less efficient but more fault tolerant than a centralized algorithm.
Option D:	**Less efficient and less fault tolerant than a centralized algorithm.**
8.	**The kernel is _____ of user threads.**
Option A:	a part of
Option B:	the creator of
Option C:	**unaware of**
Option D:	aware of

9.	**What is stub?**
Option A:	**transmits the message to the server where the server side stub receives the message and invokes procedure on the server side**
Option B:	Perform encryption and decryption
Option C:	Perform Routing operation
Option D:	Perform Retransmission of message
10.	**In a distributed file system, _____ is mapping between logical and physical objects.**
Option A:	Client interfacing
Option B:	**Naming**
Option C:	Migration
Option D:	Heterogeneity
11.	**RPC is an example of ----------**
Option A:	**synchronous communication**
Option B:	asynchronous communication
Option C:	persistent communication
Option D:	time independent operation
	(Traditional RPC waits/blocks execution until request is finished)
12.	**What is a remote object reference?**
Option A:	The variables referenced by the Method Invocation
Option B:	An identifier for the skeleton referred by a client
Option C:	An identifier for the proxy referenced by a client
Option D:	**An identifier for a remote object that is valid throughout a distributed system**

13.	**In a distributed file system, _____ is mapping between logical and physical objects.**
Option A:	Client interfacing
Option B:	**Naming**
Option C:	Migration
Option D:	Heterogeneity
14.	**Concurrency transparency is**
Option A:	Where users cannot tell where an object is physically located in the system
Option B:	Hide differences in data representation and how an object is accessed
Option C:	**Hide that an object may be shared by several independent users**

Option D:	Hide that an object is replicated
15.	**Client centric consistency model useful in applications where_____**
Option A:	Data is static
Option B:	**One client always updates data store**
Option C:	Data updates not required in the local store
Option D:	Data storage is not required
16.	**The ring election algorithm works by**
Option A:	Having all nodes in a ring of processors send a message to a coordinator who will elect the leader
Option B:	Sending a token around a set of nodes. Whoever has the token is the coordinator.
Option C:	Sending a message around all available nodes and choosing the first one on the resultant list
Option D:	**Building a list of all live nodes and choosing the largest numbered node in the list**

17.	**What is a stateless file server?**
Option A:	It keeps tracks of states of different objects
Option B:	**It maintains internally no state information at all**
Option C:	It maintains only client information in them
Option D:	It maintains only client access information in them
18.	**In which file model, a new version of the file is created each time a change is made to the file contents and the old version is retained unchanged**
Option A:	Unstructured files
Option B:	Structured files
Option C:	**Immutable files**
Option D:	Mutable files
19.	**The Ricart Agrawala distributed mutual exclusion algorithm is:**
Option A:	More efficient and more fault tolerant than a centralized algorithm.
Option B:	More efficient but less fault tolerant than a centralized algorithm.
Option C:	Less efficient but more fault tolerant than a centralized algorithm.
Option D:	**Less efficient and less fault tolerant than a centralized algorithm.**
20.	**Which of the following is NOT a technique for achieving scalability**
Option A:	**Centralization**
Option B:	Distribution
Option C:	Replication
Option D:	Caching

21.	**A layer which lies between an operating system and the applications running on it is called as -**
Option A:	Firmware
Option B:	Hardware
Option C:	Software
Option D:	**Middleware**

22.	**Goals of Distributed system does not include**
Option A:	Resource sharing
Option B:	Access to remote resources
Option C:	**Sharing memory space**
Option D:	Concurrent process execution
23.	**which of the following is not the commonly used semantics for ordered delivery of multicast messages**
Option A:	Absolute ordering
Option B:	**Persistent ordering**
Option C:	Consistent ordering
Option D:	Casual ordering
24.	**The type of transparency that enables resources to be moved while in use without being noticed by users and application is**
Option A:	Location Transparency
Option B:	Migration Transparency
Option C:	**Relocation Transparency**
Option D:	Access Transparency

25.	**A paradigm of multiple autonomous computers, having a private memory, communicating through a computer network, is known as**
Option A:	**Distributed computing**
Option B:	Cloud computing
Option C:	Centralized computing
Option D:	Parallel computing
26.	**Following is not the common mode of communication in Distributed system**
Option A:	RPC
Option B:	RMI
Option C:	Message Passing
Option D:	**Shared memory**
27.	**Following is not the physical clock synchronization algorithm**
Option A:	**Lamport's Scalar Clock synchronization**
Option B:	Christians clock synchronization
Option C:	Berkley clock synchronization
Option D:	Network time protocol
28.	**Distributed Mutual Exclusion Algorithm does not use**
Option A:	**Coordinator process**
Option B:	Token
Option C:	Logical clock for event ordering
Option D:	Request and Reply message

29.	**Vector Timestamp Ordering Algorithm is an example of-**

Option A:	Centralized Mutual Exclusion
Option B:	Distributed Mutual Exclusion
Option C:	Physical Clock Synchronization
Option D:	**Logical Clock Synchronization**
30.	**What is fault tolerance in distributed Computing?**
Option A:	Ability of system to continue functioning in the event of a complete failure.
Option B:	**Ability of system to continue functioning in the event of a partial failure.**
Option C:	Ability of system to continue functioning when system is properly working.
Option D:	Ability of distributed system to work in all conditions.
31.	**In Task Assignment Approach, we have to**
Option A:	**Minimize IPC cost**
Option B:	Maximize IPC cost
Option C:	Fix IPC cost
Option D:	Keep constant IPC cost
32.	**Backward error recovery requires**
Option A:	Grouping
Option B:	Assurance
Option C:	**Check pointing**
Option D:	Validation

33.	**Which of these consistency models does not use synchronization operations?**
Option A:	**Sequential**
Option B:	Weak
Option C:	Release
Option D:	Entry
34.	**Which is not possible in distributed file system?**
Option A:	File replication
Option B:	**Migration**
Option C:	Client interface
Option D:	Remote access
35.	**X.500 is a**
Option A:	**Directory services**
Option B:	Naming services
Option C:	Replication services
Option D:	Consistency services
36.	**A DFS is executed as a part of**
Option A:	System specific program
Option B:	**Operating system**
Option C:	File system
Option D:	Application program

37.	**Processes on the remote systems are identified by-**

Option A:	Host ID
Option B:	Identifier
Option C:	**Host name and identifier**
Option D:	Process ID
38.	**The function of load-balancing algorithm is**
Option A:	**It tries to balance the total system load by transparently transferring the workload from heavily loaded nodes to lightly loaded**
Option B:	It helps the process to know the time by simply making a call to the operating system.
Option C:	allows a process to access named entity
Option D:	It synchronizes the clocks
39.	**A Multi-threaded Server has following threads**
Option A:	Dispatcher Thread
Option B:	Client Thread
Option C:	**Worker Thread**
Option D:	Client and Server Thread
40.	**Maekawa's Mutual Exclusion Algorithm is based on**
Option A:	Coordinator selection
Option B:	Token
Option C:	**Voting**
Option D:	Tickets