Program: BE Information Technology Engineering

Curriculum Scheme: Revised 2012

Examination: Third Year Semester VI

Course Code: TEITC602 and Course Name: Distributed Systems

Time: 1 hour Max. Marks: 50

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

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| Q1.  | Which architecture are reliant on middle-ware? |
| Option A: | Multi-tier client–server architecture |
| Option B: | Master-slave architecture |
| Option C: | Distributed component architecture |
| Option D:  | Peer-to-peer architecture |
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| Q2. | In distributed system, each processor has its own  |
| Option A: | local memory |
| Option B: | clock |
| Option C: | both local memory and clock |
| Option D: | neither local memory nor clock |
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| Q3. | To resolve the problem of data representation on different systems RPCs define  |
| Option A: | machine dependent representation of data |
| Option B: | machine representation of data |
| Option C: | machine-independent representation of data |
| Option D: | machine representation of procedures |
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| Q4. | What is the full form of RMI? |
| Option A: | Remote Memory Installation |
| Option B: | Remote Memory Invocation |
| Option C: | Remote Method Installation |
| Option D: | Remote Method Invocation |
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| Q5. | The remote method invocation  |
| Option A: | allows a process to invoke memory on a remote object |
| Option B: | allows a thread to invoke a method on a remote object |
| Option C: | allows a thread to invoke memory on a remote object |
| Option D:  | allows a process to invoke a method on a remote object |
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| Q6. | A process that is based on IPC mechanism which executes on different systems and can communicate with other processes using message based communication, is called  |
| Option A: | Local Procedure Call |
| Option B: | Inter Process Communication |
| Option C: | Remote Procedure Call |
| Option D:  | Remote Machine Invocation |
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| Q7.  | In distributed systems, link and site failure is detected by  |
| Option A: | polling |
| Option B: | handshaking |
| Option C: | token passing |
| Option D:  | Message passing |
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| Q8.  | Processes on the remote systems are identified by |
| Option A: | host ID |
| Option B: | host name and identifier |
| Option C: | identifier |
| Option D:  | process ID |
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| Q9. | Under heavy load, the Raymond’s Tree Algorithm requires exchange of only \_\_\_\_\_\_\_\_\_\_\_ messages per critical section execution |
| Option A: | N, where N is the sites  |
| Option B: | 4  |
| Option C: | 3  |
| Option D:  | 0 |
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| Q10.  | “In Suzuki-Kasami’s Broadcast Algorithm, if a site does not hold the token when it makes a request, the algorithm requires how many messages to obtain the token.” |
| Option A: | N |
| Option B: | 5N-1  |
| Option C: | 4N-1  |
| Option D:  | N+1 |
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| Q11.  | Cascaded rollback which causes the system to roll back to too far in the computation (even to the beginning), in spite of all the checkpoints is known as: |
| Option A: | Rollback  |
| Option B: | Phantom Effect  |
| Option C: | Livelock  |
| Option D:  | Domino Effect |
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| Q12.  | In the wait for graph, if there exists a directed cycle or not: |
| Option A: | then a deadlock does not exist |
| Option B: | then a deadlock exists  |
| Option C: | then the system is in a safe state  |
| Option D: | either deadlock exists or the system is in a safe state |
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| Q13. | Which cache allows: Allow multiple updates to be made locally and then sends the most recent to the server |
| Option A: | Read-only Cache |
| Option B: | Write-Through Cache |
| Option C: | Write-Back Cache |
| Option D:  | Clock drift |
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| Q14.  | Another name for Replicated-Write Protocols |
| Option A: | Distributed-Write Protocols |
| Option B: | computing protocol |
| Option C: | read protocol |
| Option D:  | replicated read protocol |
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| Q15. | There are two types of Primary-Based Protocol in consistency protocol, one is Remote-Write Protocols and other one is? |
| Option A: | Local-Write Protocols |
| Option B: | Global -Write Protocols |
| Option C: | Local read Protocols |
| Option D:  | global-read Protocols |
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| Q16.  | Identify the definition of below: A write operation by a process on a data item x is completed before any successive write operation on x by the same process. |
| Option A: |  Monotonic reads |
| Option B: | Monotonic Writes |
| Option C: | Monotonic reads and Writes |
| Option D:  | Write-Through Cache |
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| Q17. | Which case of a session bean obtains the UserTransaction object via the EJBContext using the getUserTransaction() method in EJB transaction management? |
| Option A: | Bean-managed transactions |
| Option B: | Container-managed transactions |
| Option C: | Distributed-Write Protocols |
| Option D: | computing protocol |
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| Q18. | Which component does the Entity bean represent the persistent data stored in the database? |
| Option A: | Server-side component |
| Option B: | Client-side component |
| Option C: | server and client side component |
| Option D:  | Clock drift |
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| Q19.  | Which server-side component is required to be deployed on the server? |
| Option A: | EJB |
| Option B: | RMI |
| Option C: | RPC |
| Option D:  | TELNET |
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| Q20. | Which is an object, acts as a gateway for the client side, all the outgoing requests are routed through it and it resides at the client side and represents the remote object? |
| Option A: |  Stub |
| Option B: | Skeleton |
| Option C: | Server-side component |
| Option D: | Client-side component |
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| Q21. | Which program obtains a remote reference to one or more remote objects on a server and then invokes methods on them in an RMI application? |
| Option A: | Server |
| Option B: | Client  |
| Option C: |  Stub |
| Option D:  | Skeleton |
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| Q22.  | Which method in naming class specifies a name to the remote object? |
| Option A: | bind(string name)  |
| Option B: | rebind(string name) |
| Option C: | Fopen() |
| Option D:  | Close() |
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| Q23. | Which is a one-way communication only between the client and the server, which is not only a reliable but also there is no confirmation regarding reaching the message to the destination? |
| Option A: | TCP/IP |
| Option B: | UDP  |
| Option C: | TELNET |
| Option D:  | FTP |
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| Q24.  | Which of the following provides commands for defining logic using conditional statements? |
| Option A: | XML |
| Option B: | WS-BPEL  |
| Option C: | JSON |
| Option D:  | JSP |
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| Q25. | SOA \_\_\_\_\_ an extension of the Service Oriented Architecture to respond to events that occur as a result of business processes. |
| Option A: | 2.0 |
| Option B: | 3.0 |
| Option C: | 4.0 |
| Option D:  | 5.0 |