**Unit 2: COMMUNICATION AND COORDINATION**

1. An RPC (remote procedure call) is initiated by the  
a) server  
b) client  
c) both server and client  
d) none of the mentioned

**Answer: b**

2. In RPC, while a server is processing the call, the client is blocked  
a) unless the client sends an asynchronous request to the server  
b) unless the call processing is complete  
c) for the complete duration of the connection  
d) none of the mentioned

**Answer: a**

3. Remote procedure calls is  
a) inter-process communication  
b) a single process  
c) a single thread  
d) none of the mentioned

**Answer: a**

4. RPC allows a computer program to cause a subroutine to execute in  
a) its own address space  
b) another address space  
c) both its own address space and another address space  
d) none of the mentioned

**Answer: b**

5. RPC works between two processes. These processes must be  
a) on the same computer  
b) on different computers connected with a network  
c) both on the same computer and on different computers connected with a network  
d) none of the mentioned

**Answer: c**

6. A remote procedure is uniquely identified by  
a) program number  
b) version number  
c) procedure number  
d) all of the mentioned

**Answer: d**

7. An RPC application requires  
a) specific protocol for client server communication  
b) a client program  
c) a server program  
d) all of the mentioned

**Answer: d**

8. RPC is used to  
a) establish a server on remote machine that can respond to queries  
b) retrieve information by calling a query  
c) both establish a server on remote machine that can respond to queries and retrieve information by calling a query  
d) none of the mentioned

**Answer: c**

9. RPC is a  
a) synchronous operation  
b) asynchronous operation  
c) time independent operation  
d) none of the mentioned

**Answer: a**

10. The local operating system on the server machine passes the incoming packets to the  
a) server stub  
b) client stub  
c) client operating system  
d) none of the mentioned

**Answer: a**

11. Remote Procedure Calls are used :  
a) for communication between two processes remotely different from each other on the same system  
b) for communication between two processes on the same system  
c) for communication between two processes on separate systems  
d) None of the mentioned

**Answer: c**

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12. To differentiate the many network services a system supports \_\_\_\_\_\_ are used.  
a) Variables  
b) Sockets  
c) Ports  
d) Service names

**Answer: c**

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13. RPC provides a(an) \_\_\_\_\_ on the client side, a separate one for each remote procedure.  
a) stub  
b) identifier  
c) name  
d) process identifier

**Answer: a**

14. The stub :  
a) transmits the message to the server where the server side stub receives the message and invokes procedure on the server side  
b) packs the parameters into a form transmittable over the network  
c) locates the port on the server  
d) all of the mentioned

**Answer: d**

15. To resolve the problem of data representation on different systems RPCs define \_\_\_\_\_\_\_\_\_\_\_\_\_  
a) machine dependent representation of data  
b) machine representation of data  
c) machine-independent representation of data  
d) none of the mentioned

**Answer: c**

16. The full form of RMI :  
a) Remote Memory Installation  
b) Remote Memory Invocation  
c) Remote Method Installation  
d) Remote Method Invocation

**Answer: d**

17. The remote method invocation :  
a) allows a process to invoke memory on a remote object  
b) allows a thread to invoke a method on a remote object  
c) allows a thread to invoke memory on a remote object  
d) allows a process to invoke a method on a remote object

**Answer: b**

18. In distributed systems, a logical clock is associated with  
a) each instruction  
b) each process  
c) each register  
d) none of the mentioned

**Answer: b**

19. If timestamps of two events are same, then the events are  
a) concurrent  
b) non-concurrent  
c) monotonic  
d) non-monotonic

**Answer: a**

20. If a process is executing in its critical section  
a) any other process can also execute in its critical section  
b) no other process can execute in its critical section  
c) one more process can execute in its critical section  
d) none of the mentioned  
**Answer: b**

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21. A process can enter into its critical section  
a) anytime  
b) when it receives a reply message from its parent process  
c) when it receives a reply message from all other processes in the system  
d) none of the mentioned  
**Answer: c**

22. For proper synchronization in distributed systems  
a) prevention from the deadlock is must  
b) prevention from the starvation is must  
c) prevention from the deadlock & starvation is must  
d) none of the mentioned

**Answer: c**

23. In the token passing approach of distributed systems, processes are organized in a ring structure  
a) logically  
b) physically  
c) both logically and physically  
d) none of the mentioned

**Answer: a**

24. In distributed systems, transaction coordinator  
a) starts the execution of transaction  
b) breaks the transaction into number of sub transactions  
c) coordinates the termination of the transaction  
d) all of the mentioned  
**Answer: d**

25. In case of failure, a new transaction coordinator can be elected by  
a) bully algorithm  
b) ring algorithm  
c) both bully and ring algorithm  
d) none of the mentioned  
**Answer: c.**

26. In distributed systems, election algorithms assumes that  
a) a unique priority number is associated with each active process in system  
b) there is no priority number associated with any process  
c) priority of the processes is not required  
d) none of the mentioned  
**Answer: a**

27. According to the ring algorithm, links between processes are  
a) bidirectional  
b) unidirectional  
c) both bidirectional and unidirectional  
d) none of the mentioned  
**Answer: b**