



**Department of Computer Science and Engineering**  
**CS8603 Distributed Systems**  
**Unit I - MCQ Bank**

1. The processors are having different speeds and each runs different operating system but cooperate with one another by offering services for solving a problem jointly.
  - a. **loosely coupled**
  - b. tightly coupled
  - c. both a and b
  - d. none of the above
  
2. A \_\_\_\_ is the execution of processes across the distributed system to collaboratively achieve a common goal which is also termed a computation or a run.
  - a. **distributed execution**
  - b. distributed system
  - c. distributed computing
  - d. none of the above
  
3. RPC software do not sends a message across the network to invoke the remote procedure.
  - a. True
  - b. **False**
  
4. Reliability is defined in the aspect of
  - a. availability
  - b. integrity
  - c. fault-tolerance
  - d. **all of the above**
  
5. Flynn identified \_\_\_\_ processing modes.
  - a. **Four**
  - b. Three
  - c. Two
  - d. Five
  
6. In Shared memory systems there is a \_\_\_\_ throughout the System.
  - a. **common shared address space**
  - b. unique address space
  - c. two shared address space
  - d. none of the above
  
7. A distributed system is a collection of independent entities that cooperate to solve a problem that cannot be individually solved.
  - a. **True**
  - b. False

8. The challenges pertain to providing accurate\_\_\_\_, and to providing a variant of time, called\_\_\_\_.
- physical time and logical time**
  - logical time and physical time
  - relative time and logical time
  - logical time and relative time
9. \_\_\_\_is essential for the distributed processes to overcome the limited observation of the system state from the viewpoint of any one process.
- Synchronization**
  - Asynchronization
  - Physical clock synchronization
  - Logical clock synchronization
10. This is a clearly a synchronization problem because access to the critical resource(s) has to be coordinated.
- Mutual exclusion**
  - Semaphores
  - Deadlock
  - Synchronization
11. The ability to move data around in the system, based on the access pattern of the users.
- Data migration**
  - Computation migration
  - Distributed scheduling
  - None of the above
12. \_\_\_\_is important for mission-critical applications, to accomplish the task execution on schedule.
- Distributed scheduling
  - Real-time scheduling**
  - Computation migration
  - None of the above
13. A \_\_\_\_consists of a set of processors that are connected by a communication network.
- distributed system**
  - distributed network
  - distributed computing
  - both a and b
14. The logical clock  $C$  is a function that maps an event  $e$  to the time domain  $T$ , denoted as  $C(e)$  and called the\_\_\_\_, and is defined as follows:  $C: H \rightarrow T$
- timestamp of  $e$**
  - clock of  $e$
  - time domain
  - time clock

15. The \_\_\_\_\_ is widely used for clock synchronization on the Internet, uses the offset delay estimation method.
- Network Time Protocol**
  - Mobile Network Base Station
  - Network Synchronization
  - Primary Synchronization
16. The \_\_\_\_\_ of a distributed system is a collection of the \_\_\_\_\_ of its processes and the messages in the communication channels.
- global state and local state**
  - local state and global state
  - initial state and global state
  - global state and initial state
17. The actions are atomic and the actions of a process are modelled as \_\_\_\_\_ types of events.
- three**
  - four
  - two
  - six
18. \_\_\_\_\_ if and only if the events occur at the same instant in physical time.
- Physical concurrency**
  - Logical concurrency
  - Physical state
  - Logical state
19. Only authorized processes can access information.
- confidentiality**
  - Authentication
  - Availability
  - None of the above
20. Whether the information is from the correct source, identity.
- confidentiality
  - Authentication**
  - Availability
  - None of the above
21. Maintaining allowed access to services despite malicious actions
- confidentiality
  - Authentication
  - Availability**
  - None of the above
22. In distributed system, each processor has its own \_\_\_\_\_
- local memory
  - clock
  - both local memory and clock**
  - none of the mentioned

23. The capability of a system to adapt the increased service load is called \_\_\_\_\_
- a. **scalability**
  - b. tolerance
  - c. capacity
  - d. none of the mentioned
24. Within the network we can have a number of computers sharing resources maintained by independent administrators, called as
- a. User
  - b. **Workgroup**
  - c. Both
  - d. None
25. If one site fails in distributed system, \_\_\_\_\_
- a. **the remaining sites can continue operating**
  - b. all the sites will stop working
  - c. directly connected sites will stop working
  - d. none of the mentioned