

Vasantdada Patil Prathisthan's College of Engineering & Visual Arts, Sion, Mumbai-22 Department of Computer Engineering

Class: B.E. (Comp) Sem: VIII (FH 2022) Subject: Distributed Computing Sub. In-charge: Manjiri Pathak Name of the innovative teaching method / activity: Quiz Total Marks: 40

Introduction of the activity :-

Quiz for BE students for better understanding of modules included in above mentioned subject and to update their knowledge for various competitive exams.

Objective:

to encourage the broad understanding of a subject 'Distributed Computing'.

Outcome:

Students will be able to use the concepts learnt from all topics in the subject mentioned above to solve the questions. It can help them to practice for various competitive exams or interviews.

Questions for the Quiz

- 1. If one site fails in distributed system then _____
 - 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
- 2. Which of the following types of communication are supported by message oriented system?
 - a) Persistent communication
 - b) Transient communication
 - c) Transient asynchronous communication
 - d) All of the above
- 3. 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
- 4. 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
 - a) Local Procedure Call
 - b) Inter Process Communication
 - c) Remote Procedure Call
 - d) Remote Machine Invocation
- 5. Which of the following techniques are used for scheduling processes in Distributed System?
 - a) Load balancing approach
 - b) Task assignment approach
 - c) Load sharing approach
 - d) All of the above
- 6. Virtualization that creates one single address space architecture is called
 - a) Loosely coupled b) Peer-to-Peer
 - c) Space-based d) Tightly coupled
- 7. The _____ becomes the name of the root of the newly mounted directory.a) root of the previous directory
 - b) local directory
 - c) remote directory itself
 - d) none of the mentioned
- 8. In UNIX, the file handle consists of a ______ and _____a) file-system identifier & an inode number
 - b) an inode number & FAT
 - c) a FAT & an inode number
 - d) a file pointer & FAT
- 9. Thread synchronization is required because _____
 - a) all threads of a process share the same address space
 - b) all threads of a process share the same global variables
 - c) all threads of a process can share the same files
 - d) all of the mentioned
- 10. What is the advantage of caching in remote file access?a) Reduced network traffic by retaining recently accessed disk blocks

- b) Faster network access
- c) Copies of data creates backup automatically
- d) None of the mentioned
- 11. What are the characteristics of Unix semantics?
 - a) Easy to implement in a single processor system
 - b) Data cached on a per process basis using write through case control
 - c) Write-back enhances access performance
 - d) All of the mentioned
- 12. Which of the following approaches are used to achieve reliable systems?
 - a) Fault prevention
 - b) Fault removal
 - c) Fault tolerance
 - d) All of the mentioned

13. Which of these is not a type of failure models?

- a) Crash failure
- b) Causal consistency
- c) Omission failure
- d) Response failure
- 14. What are the characteristics of data migration?
 - a) transfer data by entire file or immediate portion required
 - b) transfer the computation rather than the data
 - c) execute an entire process or parts of it at different sites
 - d) none of the mentioned
- 15. What are characteristic of Network Operating Systems?
 - a) They are simple to use
 - b) They are transparent
 - c) Users are aware of multiplicity of machines
 - d) All of the mentioned
- 16. What are the characteristics of fully distributed approach?

i) When responses are received from all processes, then process can enter its Critical Section

ii) When process exits its critical section, the process sends reply messages to all its deferred requests.

- iii) It requires request, reply and release per critical section entry
- iv) One processor as coordinator which handles all requests

a) i b) i and ii c) ii and iii

d) iii and iv

17. What are the advantages of token (with rings) passing approach?

- i) One processor as coordinator which handles all requests
- ii) No starvation if the ring is unidirectional
- iii) There are many messages passed per section entered if few users want to get in section
- iv) One processor as coordinator which handles all requests
- v) Only one message/entry if everyone wants to get in

a) i

- b) ii and iii
- c) i, ii and iii
- d) i, ii and iv

18. What are the ways to organize the servers?

- a) Iterative server
- b) Multi-threaded server
- c) Concurrent server
- d) All of the above
- 19. If timestamps of two events are same, then the events area) concurrentb) non-concurrentc) monotonicd) non-monotonic
- 20. A software that lies between the OS and the applications running on it.
 - a) Firmware
 - b) Middle ware
 - c) Utility Software
 - d) Application Software