

DS-QB

- ✓ 1. Provides for a common shared interface for both applications and components
 - a. OS
 - b. Middleware
 - c. Application network
- ✓ 2. What type of transparency hide that a resource may be shared by several competitive users
 - a. Failure
 - b. Location
 - c. Migration
 - d. Concurrency
- ✓ 3. Hiding non-relevant properties of the system's components and structure is called
 - a. Openness
 - b. Scalability
 - c. Transparency
 - d. Graphical solution
- ✓ 4. A system that offers services according to standard rules that describe the syntax and semantics of those services
 - a. Openness
 - b. Resource sharing
 - c. Scalability
- ✓ 5. Measures how much an application (or, a portion of it) can be moved to a different distributed system and keep working
 - a. Interoperability
 - b. Portability

c. Extensibility

✓ 6. Doing routing based on complete information

a. Centralized services

b. Centralized data

c. Centralized algorithms

✓ 7. Scalability problems with scaling with respect to size is

a. Centralization

b. Communication

c. Administration

✓ 8. Hiding communication latency, distribution, replication are the techniques for which type of scalability

a. Geographical

b. Size

c. Administration

d. Users

✓ 9. Making a copy of a resource from the original location to a location in the proximity of the users

a. Caching

b. Replication

c. Distribution

✓ 10. A collection of similar workstations, running the same OS, located in the same area, interconnected through a high-speed Lan.

a. Cluster Computing Systems

b. Grid Computing Systems

c. Cloud Computing Systems

✓ 11. Interface to local resource at a specific site

- a. Connectivity layer
- b. Resource layer
- c. Fabric layer
- d. Collective layer

✓ 12. The backbone for most cloud computing platforms

- a. Infrastructure
- b. Application
- c. SaaS
- d. Transaction

✓ 13. provides the customers, dynamically on demand, with the required computing resources usually in the form of virtual machines (VMs)

- a. Software as a Service (SaaS)
- b. Infrastructure as a Service (IaaS)
- c. Platform as a Service (PaaS)
- d. Application as a Service (SaaS)

✓ 14. What property once a transaction commits, its effects are permanent

- a. Isolated
- b. Durable
- c. Atomic
- d. Consistent

✓ 15. Instability is the default behavior of

- a. Distributed computing systems
- b. Distributed information systems
- c. Distributed pervasive systems

✓ 16. The logical organization of distributed systems into software components.

- a. Software architecture

Remember Not
System Architecture

- b. Component
- c. Connector
- d. Architectural style

✓ 17. Is formulated in terms of components, the way that components are connected to each other, the data exchanged between components.

- a. Software architecture
- b. Component
- c. Connector
- d. Architectural style

✓ 18. Evolve around the idea of processes communicate through a common repository.

- a. Layered architecture
- b. Object-based architecture
- c. Data-based architecture
- d. Event-based architecture

✓ 19. A network in which the nodes are formed by the processes and the links represent the possible communication channels.

- a. Overlay network
- b. Distributed hash table
- c. LAN network

✓ 20. Alternative to peer to peer system propose to make use of special nodes that maintain index of data items

- a. Super peer
- b. Structure peer to peer
- c. CAN
- d. Chord

✓ 21. In synchronous communication

- a. Only sender blocks
- b. Only receiver blocks
- c. Both of them block
- d. None of them block

✓ 2. Messages must arrive uncorrupted and without duplication

- a. Integrity
- b. Validity
- c. None

✓ 3. Internet protocols that implement Non-blocking send and Blocking receive

- a. UDP
- b. TCP
- c. Both

✓ 4. Is the process of assembling a collection of data items in a form suitable for transmission

- a. Marshalling
- b. Unmarshalling
- c. None

✓ 5. Can be used by a variety of programming languages

- a. CORBA
- b. Java's object serialization
- c. XML (Extensible Markup Language)

✓ 26. The activity of flattening object or a related set of objects in a serial form suitable for transmitting in a message.

- a. Serialization
- b. Deserialization
- c. None

✓ 27. An operation that sends a single message from one process to each of the members of a group of processes

- a. Multicast
- b. Remote communication
- c. broadcast

✓ 28. One of the multicast advantages is that even when some of the members fail, clients can still be served.

- a. Fault tolerance
- b. Propagation of event notifications
- c. Better performance

✓ 29. Used by clients to send a request message for invoking remote operations

- a. doOperation
- b. getRequest
- c. sendReply

✓ 30. Acknowledgments are not required and Flow control is not needed.

- a. Remote method invocation
- b. Request-Reply Protocols
- c. Remote Procedure Call (RPC)

✓ 31. In which RRP failure we use timeout and resend request when timeout expires and reply hasn't arrived.

- a. Loss of replies
- b. Message duplication
- c. Omission Failures

✓ 32. In which operations same result obtained on every invocation

- a. Idempotent
- b. Non-Idempotent

= unchange

- c. Both
- d. None

✓ 33. Omission failures resulting from loss of replies can be recovered using

- a. UDP
- b. HTTP
- ✓ c. Request-Reply-Acknowledge reply (RRA) protocol

✓ 34. Request-Reply protocol for the exchange of network resources between web browser clients and web servers

- ✓ a. HTTP
- b. TCP
- c. UDP
- d. DNS

✓ 35. Local object invokes methods of an object residing on a remote computer

- a. Remote Procedure Call (RPC)
- b. Hypertext Transfer Protocol (HTTP)
- ✓ c. Remote Method Invocation (RMI)

✓ 36. Request/Reply protocol used to implement RPC can use either UDP or TCP

- ✓ a. Transport protocol transparency
- b. Location transparency
- c. Operating system transparency
- d. Hardware transparency

✓ 37. Pointers are not valid and pointers and local parameter passing mechanisms (by value, by reference) is not applicable in

- a. Remote Method Invocation (RMI)
- ✓ b. Remote Procedure Call (RPC)
- c. Request-reply Protocols

38. Allow procedure to be implemented in different languages
- a. Interface Definition Languages (IDL)
 - b. Call/Invocation Semantics
 - c. Request-reply protocol
39. With which type of semantics, the remote procedure call may be executed once or not at all
- a. At-least-once semantics
 - b. At-most-once semantics
 - c. Maybe semantics
40. Request message is retransmitted, the remote server may receive it and execute the procedure more than once, possibly causing wrong values to be stored or returned
- a. Crash failures
 - b. Omission failures
 - c. Arbitrary failures
41. Failure in which request or result message is lost
- a. Crash failures
 - b. Omission failures
 - c. Arbitrary failures
42. Marshals the procedure identifier and the arguments into a request message, which it sends via its communication module to the server
- a. Client stub procedures
 - b. Server stub procedures
 - c. Dispatcher
43. Selects one of the server stub procedures according to the procedure identifier in the request message
- a. Client stub procedures

- b. Server stub procedures
 - c. Dispatcher
44. Identifier that can be used throughout a distributed system to refer to a particular unique remote object
- a. Remote object reference
 - b. Remote interfaces
 - c. Garbage Collection
45. Enables automatic deletion of remote objects that are no long in use
- a. Remote object reference
 - b. Remote interfaces
 - c. Garbage Collection
46. Application layer hiding non-relevant properties of the system's components and structure
- a. True
 - b. False
47. Migration transparency means hiding that a resource may move to another location
- a. True
 - b. False
48. Relocation transparency means hiding that a resource may move to another location while in use
- a. True
 - b. False
49. the basic idea of distribution is avoiding the time waiting for remote responses to service requests whenever possible
- a. True
 - b. False
50. Replication is a decision by the client of a resource

- a. True
 - b. False
51. peer-to-peer is used to solve problems in administrative scalability.
- a. True
 - b. False
52. In distributed systems, the latency is zero.
- a. True
 - b. False
53. Distributed Information systems use a multiplicity of distributed computers to perform high-performance tasks
- a. True
 - b. False
54. Cluster, Grid, and Cloud are examples of Distributed computing systems
- a. True
 - b. False
55. Beowulf is an example of Grid computing systems
- a. True
 - b. False
56. Cluster computing systems are heterogeneous
- a. True
 - b. False
57. Cloud computing is generally based on a pay-per-use model
- a. True
 - b. False
58. The core of a grid middleware layer is represented by collective and application layers

- a. True
 - b. False
59. Durability in ACID properties refers to the bottom-level transaction
- a. True
 - b. False
60. Devices of Distributed Information Systems are characterized by being small, battery-powered, mobile, and have wireless connections.
- a. True
 - b. False
61. Electronic Health care Systems can be classified as Distributed Pervasive Systems.
- a. True
 - b. False
62. Software as a Service (SaaS) provides customers, dynamically on demand, with the required computing resources usually in the form of virtual machines
- a. True
 - b. False
63. In Cluster Computing Systems, If more work needs to be done, a customer can simply acquire more resources
- a. True
 - b. False
64. Datagrams sent from socket to socket with acknowledgment or reliability.
- a. True
 - b. False
65. DNS and VOIP are applications of the UDP protocol
- a. True
 - b. False

66. Services run over TCP connections are HTTP, SMTP, and FTP
- a. True
 - b. False
67. XML (Extensible Markup Language) defines a textual format for representing structured data.
- a. True
 - b. False
68. Service interface is in Remote Method Invocation (RMI).
- a. True
 - b. False
69. Remote interface is in Remote Method Invocation (RMI).
- a. True
 - b. False
70. Remote Reference Module is responsible for translating between local and remote object references.
- a. True
 - b. False