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

22. Messages must arrive uncorrupted and without duplication

a. Integrity

b. Validity

c. None

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

a. UDP

b. TCP

c. Both

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

a. Marshalling

b. Unmarshalling

c. None

25. 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 <u>from one process to each of the members of a group of processes</u>

    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   = unchange

    b. Non-Idempotent

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 serve

   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