

SAVEETHA SCHOOL OF ENGINEERING

SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Course Code: CSA15

Course Name: Cloud Computing and Big data Analytics

Branch: CSE

VIVA QUESTIONS AND ANSWERS

1. What is cloud computing?

a) A method to store data locally

b) A technology to create virtual machines

c) A model to deliver computing resources over the internet

d) A programming language for web development

Answer: c) A model to deliver computing resources over the internet

2. Which of the following is not a characteristic of cloud computing?

a) On-demand self-service

b) Broad network access

c) Limited scalability

d) Resource pooling

Answer: c) Limited scalability

3. Which cloud service model provides the highest level of control to the user?

a) Software as a Service (SaaS)

b) Platform as a Service (PaaS)

c) Infrastructure as a Service (IaaS)

d) Function as a Service (FaaS)

Answer: c) Infrastructure as a Service (IaaS)

4. Which cloud deployment model is suitable for sensitive data that requires high security?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: b) Private cloud

5. Which of the following is not a leading cloud service provider?

a) Amazon Web Services (AWS)

b) Microsoft Azure

c) Google Cloud Platform (GCP)

d) IBM Cloud

Answer: d) IBM Cloud

6. Which cloud computing model allows users to run their applications without managing the underlying infrastructure?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: b) PaaS

7. Which cloud computing model is most suitable for a developer who wants to deploy and manage applications quickly?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: b) PaaS

8. Which cloud computing model offers complete control and responsibility to the user?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

9. Which cloud service model provides applications and services over the internet?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: c) SaaS

10. Which cloud deployment model combines public and private clouds, allowing data and applications to be shared between them?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: c) Hybrid cloud

11. Which cloud service model offers virtualized computing resources such as virtual machines and storage?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

12. Which cloud deployment model is the most cost-effective for startups and small businesses?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: a) Public cloud

13. What does SaaS stand for?

a) Software as a Service

b) Storage as a Service

c) Security as a Service

d) Serverless as a Service

Answer: a) Software as a Service

14. Which cloud computing model offers a pay-per-use pricing model?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

15. Which cloud deployment model is suitable for organizations with shared interests, such as research communities?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: d) Community cloud

16. Which cloud computing model allows users to deploy and run individual functions in the cloud without managing the infrastructure?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: d) FaaS

17. Which cloud service model provides a development environment for building, testing, and deploying applications?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: b) PaaS

18. Which cloud deployment model offers the highest level of data privacy and control?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: b) Private cloud

19. What is the primary benefit of cloud computing?

a) Increased hardware costs

b) Limited scalability

c) Reduced IT infrastructure management

d) Restricted access to data

Answer: c) Reduced IT infrastructure management

20. Which cloud computing model offers the least amount of control to the user?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: c) SaaS

21. Which cloud service model allows users to focus on building applications rather than managing infrastructure?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: b) PaaS

22. Which cloud deployment model provides the most flexibility and scalability?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: a) Public cloud

23. Which cloud computing model offers a virtualized environment for running applications?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: b) PaaS

24. Which cloud service model is responsible for managing the entire cloud infrastructure?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

25. Which cloud deployment model is suitable for organizations that require both high security and flexibility?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: c) Hybrid cloud

26. Which cloud service model provides the highest level of abstraction to the user?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: c) SaaS

27. What is the purpose of load balancing in cloud computing?

a) To distribute network traffic evenly across multiple servers

b) To secure data transmission between client and server

c) To automate the deployment of applications in the cloud

d) To monitor resource utilization in real-time

Answer: a) To distribute network traffic evenly across multiple servers

28. Which cloud computing model offers the fastest time to market for new applications?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: b) PaaS

29. Which cloud deployment model provides the highest level of customization and control?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: b) Private cloud

30. What is the purpose of auto-scaling in cloud computing?

a) To automate the allocation of virtual machines

b) To dynamically adjust resources based on demand

c) To optimize network performance and latency

d) To enforce security policies and access controls

Answer: b) To dynamically adjust resources based on demand

31. Which cloud service model is responsible for managing applications and data?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: c) SaaS

32. What is the primary concern when adopting cloud computing?

a) Data security and privacy

b) Lack of scalability

c) High upfront costs

d) Inadequate network bandwidth

Answer: a) Data security and privacy

33. Which cloud deployment model is suitable for organizations that require high scalability and cost-efficiency?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: a) Public cloud

34. Which cloud computing model offers serverless execution of code?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: d) FaaS

35. Which cloud service model allows users to manage applications and data while leaving the underlying infrastructure to the cloud provider?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: b) PaaS

36. What is the purpose of data replication in cloud computing?

a) To synchronize data across multiple servers for redundancy

b) To improve network performance and reduce latency

c) To secure data transmission between client and server

d) To monitor resource utilization in real-time

Answer: a) To synchronize data across multiple servers for redundancy

37. Which cloud deployment model is suitable for organizations with specific compliance requirements?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: b) Private cloud

38. What is the role of a hypervisor in cloud computing?

a) To manage network traffic and routing in the cloud

b) To monitor resource utilization and performance

c) To provide virtualization of computing resources

d) To ensure data integrity and security

Answer: c) To provide virtualization of computing resources

39. Which cloud service model offers pre-built software applications accessible over the internet?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: c) SaaS

40. Which cloud deployment model provides the highest level of reliability and fault tolerance?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: a) Public cloud

41. What is the purpose of data encryption in cloud computing?

a) To improve network performance and reduce latency

b) To ensure data integrity and security

c) To automate the deployment of applications in the cloud

d) To distribute network traffic evenly across multiple servers

Answer: b) To ensure data integrity and security

42. Which cloud computing model offers the most cost-effective solution for temporary workloads and experimentation?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

43. What is the role of a virtual machine in cloud computing?

a) To manage network traffic and routing in the cloud

b) To provide virtualization of computing resources

c) To synchronize data across multiple servers for redundancy

d) To secure data transmission between client and server

Answer: b) To provide virtualization of computing resources

44. Which cloud deployment model is suitable for organizations that require collaboration and resource sharing among multiple entities?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: d) Community cloud

45. What is the purpose of data backup in cloud computing?

a) To automate the allocation of virtual machines

b) To distribute network traffic evenly across multiple servers

c) To ensure data availability and recovery in case of failures

d) To optimize network performance and latency

Answer: c) To ensure data availability and recovery in case of failures

46. Which cloud service model offers the most flexibility and control over the underlying infrastructure?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

47. What is the role of a load balancer in cloud computing?

a) To synchronize data across multiple servers for redundancy

b) To manage network traffic and routing in the cloud

c) To enforce security policies and access controls

d) To optimize network performance and reduce latency

Answer: b) To manage network traffic and routing in the cloud

48. Which cloud deployment model is suitable for organizations that require a combination of on-premises and cloud resources?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: c) Hybrid cloud

49. What is the purpose of virtualization in cloud computing?

a) To ensure data integrity and security

b) To provide virtualized computing resources

c) To automate the deployment of applications in the cloud

d) To monitor resource utilization and performance

Answer: b) To provide virtualized computing resources

50. Which cloud service model offers serverless execution of code on a per-function basis?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: d) FaaS

51. Which cloud deployment model is suitable for organizations with unpredictable or fluctuating workloads?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: c) Hybrid cloud

52. What is the purpose of containerization in cloud computing?

a) To synchronize data across multiple servers for redundancy

b) To ensure data availability and recovery in case of failures

c) To provide isolation and portability for applications and services

d) To optimize network performance and reduce latency

Answer: c) To provide isolation and portability for applications and services

53. Which cloud service model offers pre-configured virtualized environments for running applications?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: b) PaaS

54. What is the role of a firewall in cloud computing?

a) To distribute network traffic evenly across multiple servers

b) To secure data transmission between client and server

c) To automate the allocation of virtual machines

d) To monitor resource utilization and performance

Answer: b) To secure data transmission between client and server

55. Which cloud deployment model is suitable for organizations that require complete control over the infrastructure and data?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: b) Private cloud

56. What is the purpose of resource pooling in cloud computing?

a) To improve network performance and reduce latency

b) To automate the deployment of applications in the cloud

c) To synchronize data across multiple servers for redundancy

d) To optimize resource utilization and efficiency

Answer: d) To optimize resource utilization and efficiency

57. Which cloud service model offers the most comprehensive suite of applications and services?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: c) SaaS

58. What is the role of a content delivery network (CDN) in cloud computing?

a) To provide virtualization of computing resources

b) To ensure data integrity and security

c) To optimize network performance and reduce latency

d) To enforce security policies and access controls

Answer: c) To optimize network performance and reduce latency

59. Which cloud deployment model is suitable for organizations that require strict regulatory compliance?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: b) Private cloud

60. What is the purpose of data migration in cloud computing?

a) To distribute network traffic evenly across multiple servers

b) To automate the allocation of virtual machines

c) To ensure data availability and recovery in case of failures

d) To synchronize data from on-premises systems to the cloud

Answer: d) To synchronize data from on-premises systems to the cloud

61. Which cloud service model offers the highest level of scalability and elasticity?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

62. What is the role of a data center in cloud computing?

a) To provide virtualization of computing resources

b) To ensure data integrity and security

c) To manage network traffic and routing in the cloud

d) To host and maintain physical infrastructure for cloud services

Answer: d) To host and maintain physical infrastructure for cloud services

63. Which cloud deployment model is suitable for organizations that require data isolation and privacy?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: b) Private cloud

64. What is the purpose of identity and access management (IAM) in cloud computing?

a) To enforce security policies and access controls

b) To automate the deployment of applications in the cloud

c) To optimize network performance and reduce latency

d) To synchronize data across multiple servers for redundancy

Answer: a) To enforce security policies and access controls

65. Which cloud service model offers the highest level of abstraction and ease of use for developers?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: d) FaaS

66. What is the purpose of fault tolerance in cloud computing?

a) To synchronize data across multiple servers for redundancy

b) To improve network performance and reduce latency

c) To ensure data availability in case of failures

d) To automate the allocation of virtual machines

Answer: c) To ensure data availability in case of failures

67. Which cloud deployment model is suitable for organizations that require cost-effective resource sharing among a specific group of users?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: d) Community cloud

68. What is the role of a service-level agreement (SLA) in cloud computing?

a) To distribute network traffic evenly across multiple servers

b) To ensure data integrity and security

c) To define the terms and conditions of service between the cloud provider and user

d) To optimize network performance and reduce latency

Answer: c) To define the terms and conditions of service between the cloud provider and user

69. Which cloud service model offers the most control and customization options for developers?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

70. What is the purpose of data deduplication in cloud computing?

a) To automate the allocation of virtual machines

b) To improve network performance and reduce latency

c) To synchronize data across multiple servers for redundancy

d) To optimize storage efficiency by eliminating duplicate data

Answer: d) To optimize storage efficiency by eliminating duplicate data

71. Which cloud deployment model is suitable for organizations that require high scalability and fault tolerance?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: a) Public cloud

72. What is the role of a data lake in cloud computing?

a) To distribute network traffic evenly across multiple servers

b) To provide virtualization of computing resources

c) To store and analyze large volumes of structured and unstructured data

d) To ensure data integrity and security

Answer: c) To store and analyze large volumes of structured and unstructured data

73. Which cloud service model offers the most control and responsibility to the user?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

74. What is the purpose of data governance in cloud computing?

a) To automate the deployment of applications in the cloud

b) To synchronize data across multiple servers for redundancy

c) To enforce data management policies and compliance

d) To optimize network performance and reduce latency

Answer: c) To enforce data management policies and compliance

75. Which cloud deployment model is suitable for organizations that require a combination of public and private cloud resources?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: c) Hybrid cloud

76. What is the role of a data protection officer (DPO) in cloud computing?

a) To enforce security policies and access controls

b) To ensure data integrity and security

c) To manage network traffic and routing in the cloud

d) To optimize resource utilization and efficiency

Answer: b) To ensure data integrity and security

77. Which cloud service model offers the most comprehensive control over the application stack?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

78. What is the purpose of data sovereignty in cloud computing?

a) To distribute network traffic evenly across multiple servers

b) To ensure data availability and recovery in case of failures

c) To store data within the legal jurisdiction or control of the data owner

d) To automate the allocation of virtual machines

Answer: c) To store data within the legal jurisdiction or control of the data owner

79. Which cloud deployment model is suitable for organizations that require resource pooling and cost optimization?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: a) Public cloud

80. What is the role of a cloud orchestrator in cloud computing?

a) To synchronize data across multiple servers for redundancy

b) To automate the allocation of virtual machines

c) To manage network traffic and routing in the cloud

d) To ensure data integrity and security

Answer: b) To automate the allocation of virtual machines

81. Which cloud service model offers on-demand access to virtualized computing resources?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

82. What is the purpose of data anonymization in cloud computing?

a) To improve network performance and reduce latency

b) To ensure data availability and recovery in case of failures

c) To synchronize data across multiple servers for redundancy

d) To protect privacy by removing personally identifiable information from data

Answer: d) To protect privacy by removing personally identifiable information from data

83. Which cloud deployment model is suitable for organizations that require resource sharing among a specific group of users?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: d) Community cloud

84. What is the role of a cloud service provider (CSP) in cloud computing?

a) To enforce security policies and access controls

b) To ensure data integrity and security

c) To provide cloud services and infrastructure to users

d) To optimize network performance and reduce latency

Answer: c) To provide cloud services and infrastructure to users

85. Which cloud service model offers the most ready-to-use software applications?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: c) SaaS

86. What is the purpose of data archiving in cloud computing?

a) To automate the allocation of virtual machines

b) To ensure data availability and recovery in case of failures

c) To optimize network performance and reduce latency

d) To store data for long-term retention and compliance

Answer: d) To store data for long-term retention and compliance

87. Which cloud deployment model is suitable for organizations that require maximum control and customization?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: b) Private cloud

88. What is the role of a data scientist in cloud computing?

a) To distribute network traffic evenly across multiple servers

b) To ensure data integrity and security

c) To analyze and derive insights from large volumes of data in the cloud

d) To enforce security policies and access controls

Answer: c) To analyze and derive insights from large volumes of data in the cloud

89. Which cloud service model offers the most rapid application development and deployment capabilities?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: b) PaaS

90. What is the purpose of data classification in cloud computing?

a) To synchronize data across multiple servers for redundancy

b) To automate the allocation of virtual machines

c) To ensure data availability and recovery in case of failures

d) To categorize data based on its sensitivity and security requirements

Answer: d) To categorize data based on its sensitivity and security requirements

91. Which cloud deployment model is suitable for organizations that require cost efficiency and scalability?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: a) Public cloud

92. What is the role of a cloud broker in cloud computing?

a) To improve network performance and reduce latency

b) To provide virtualization of computing resources

c) To synchronize data across multiple servers for redundancy

d) To facilitate the selection and integration of cloud services from multiple providers

Answer: d) To facilitate the selection and integration of cloud services from multiple providers

93. Which cloud service model offers the most granular control over individual functions or operations?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: d) FaaS

94. What is the purpose of data governance in cloud computing?

a) To enforce security policies and access controls

b) To synchronize data across multiple servers for redundancy

c) To automate the allocation of virtual machines

d) To ensure data quality, compliance, and management

Answer: d) To ensure data quality, compliance, and management

95. Which cloud deployment model is suitable for organizations that require collaboration and resource sharing within a specific community?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: d) Community cloud

96. What is the role of a cloud architect in cloud computing?

a) To distribute network traffic evenly across multiple servers

b) To ensure data integrity and security

c) To design and plan the overall cloud infrastructure and services

d) To optimize resource utilization and efficiency

Answer: c) To design and plan the overall cloud infrastructure and services

97. Which cloud service model offers the most ready-to-use infrastructure components?

a) IaaS

b) PaaS

c) SaaS

d) FaaS

Answer: a) IaaS

98. What is the purpose of data masking in cloud computing?

a) To automate the deployment of applications in the cloud

b) To synchronize data across multiple servers for redundancy

c) To protect sensitive data by replacing it with fictitious or scrambled values

d) To optimize network performance and reduce latency

Answer: c) To protect sensitive data by replacing it with fictitious or scrambled values

99. Which cloud deployment model is suitable for organizations that require high customization and control over the infrastructure?

a) Public cloud

b) Private cloud

c) Hybrid cloud

d) Community cloud

Answer: b) Private cloud

100. What is the role of a cloud governance framework in cloud computing?

a) To distribute network traffic evenly across multiple servers

b) To ensure data integrity and security

c) To provide guidelines and best practices for managing cloud resources and services

d) To optimize resource utilization and efficiency

Answer: c) To provide guidelines and best practices for managing cloud resources and services