



**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**