

QUESTION BANK (21CS72)

2021 SCHEME

MODULE 1

1. What is the innovative characteristic of cloud computing?
2. Which are the technologies on which cloud computing relies?
3. Provide a brief characterization of a distributed system.
4. Define cloud computing and identify its core features.
5. What are the major distributed computing technologies that led to cloud computing?
6. What is virtualization?
7. What is the major revolution introduced by Web 2.0?
8. Give some examples of Web 2.0 applications.
9. Describe the main characteristics of a service orientation.
10. What is utility computing?
11. Describe the vision introduced by cloud computing.
12. Briefly summarize the Cloud Computing Reference Model.
13. What is the major advantage of cloud computing?
14. Briefly summarize the challenges still open in cloud computing.
15. How is cloud development different from traditional software development?

MODULE 2

1. What is virtualization and what are its benefits?
2. What are the characteristics of virtualized environments?
3. Discuss classification or taxonomy of virtualization at different levels.
4. Discuss the machine reference model of execution virtualization.
5. What are hardware virtualization techniques?
6. List and discuss different types of virtualization.
7. What are the benefits of virtualization in the context of cloud computing?
8. What are the disadvantages of virtualization?
9. What is Xen? Discuss its elements for virtualization.
10. Discuss the reference model of full virtualization.
11. Discuss the architecture of Hyper-V. Discuss its use in cloud computing.

MODULE 3

1. What does the acronym *XaaS* stand for?
2. What are the fundamental components introduced in the cloud reference model?
3. What does Infrastructure-as-a-Service refer to?
4. Which are the basic components of an IaaS-based solution for cloud computing?
5. Provide some examples of IaaS implementations.
6. What are the main characteristics of a Platform-as-a-Service solution?
7. Describe the different categories of options available in a PaaS market.
8. What does the acronym SaaS mean? How does it relate to cloud computing?
9. Give the name of some popular Software-as-a-Service solutions.
10. Classify the various types of clouds.
11. Give an example of the public cloud.
12. Which is the most common scenario for a private cloud?
13. What kinds of needs are addressed by heterogeneous clouds?
14. Describe the fundamental features of the economic and business model behind cloud computing.
15. How does cloud computing help to reduce the time to market for applications and to cut down capital expenses?
16. List some of the challenges in cloud computing.

MODULE 5

1. What is AWS? What types of services does it provide?
2. Describe Amazon EC2 and its basic features.
3. What is a bucket? What type of storage does it provide?
4. What are the differences between Amazon SimpleDB and Amazon RDS?
5. What type of problems does the Amazon Virtual Private Cloud address?
6. Introduce and present the services provided by AWS to support connectivity among applications.
7. What is the Amazon CloudWatch?
8. What type of service is AppEngine?
9. Describe the core components of AppEngine.
10. What are the development technologies currently supported by AppEngine?
11. What is DataStore? What type of data can be stored in it?
12. Discuss the compute services offered by AppEngine.
 1. What are the types of applications that can benefit from cloud computing?
 2. What fundamental advantages does cloud technology bring to scientific applications?
 3. Describe how cloud computing technology can be applied to support remote ECG monitoring.
 4. Describe an application of cloud computing technology in the field of biology.
 5. What are the advantages cloud computing brings to the field of geoscience? Explain with an example.
 6. Describe some examples of CRM and ERP implementations based on cloud computing technologies.
 7. What is [Salesforce.com](https://www.salesforce.com)?
 8. What are Dropbox and iCloud? Which kinds of problems do they solve by using cloud technologies?
 9. Describe the key features of Google Apps.
 10. What are Web desktops? What is their relationship to cloud computing?
 11. What is the most important advantage of cloud technologies for social networking applications?
 12. Provide some examples of media applications that use cloud technologies.
 13. Describe an application of cloud technologies for online gaming.