

Question Bank

Unit 1: Introduction to Computing Technology

1. What is cluster computing and how does it differ from other types of computing architectures?
2. Describe in detail the different types of cluster computing.
3. How does grid computing work? Describe its types and advantages.
4. Explain in detail the benefits and limitations of grid computing.
5. Explain the key components of a cluster computing system and their roles in ensuring efficient processing.
6. Explain the main characteristics that differentiate cloud computing from traditional computing models.
7. What are the typical roles involved in cloud computing, and what responsibilities do they entail?
8. Discuss the applications of cloud computing in various industries such as healthcare, education, and e-commerce.
9. Discuss in detail the difference between grid computing and cluster computing with examples.
10. How does the elasticity characteristic of cloud computing benefit businesses?
11. Discuss the various cloud deployment models and their use cases.
12. What are the primary advantages and disadvantages of the Software as a Service (SaaS) model?
13. Describe the four main cloud deployment models and provide examples of scenarios where each would be most appropriate.
14. What are the main considerations for choosing a public cloud over a private cloud?
15. What are the desired features of a cloud computing environment from a user perspective?
16. How do features like scalability and reliability impact the effectiveness of cloud services?
17. What are the primary benefits of adopting cloud computing for organizations?
18. Discuss some of the disadvantages and limitations of cloud computing that organizations should be aware of.

19. Compare public cloud and private cloud based on security, cost, and accessibility.
20. Identify and explain the main challenges associated with cloud computing. Provide solutions to overcome them.
21. Compare the cloud service models IaaS, PaaS, and SaaS with examples.
22. A company wants to reduce IT maintenance costs and avoid frequent software updates on local machines. How can SaaS be a cost-effective solution for them?
23. An organization is exploring different cloud deployment models to determine the best fit for its various requirements. List out all the cloud deployment models and discuss which scenarios each model would be most appropriate.
24. For a large scale computing projects, analyze the Cloud, Grid and Cluster Computing in terms of flexibility and scalability.
25. A small business wants to reduce IT infrastructure costs and scale its operations quickly. Which cloud service model (IaaS, PaaS, SaaS) should they choose and why?