# Ganpat University CE/IT/CE-AI Department 2CEIT603- Cloud Computing CC\_Questions\_Bank\_2024

### **Pre-Requisites** 1. Differentiate Grid and Cloud Computing. [3] 2. Differentiate Grid and Cluster Computing. [3] 3. Differentiate Peer to Peer Computing and Cluster Computing? [2] 4. What is Utility Oriented Computing? [2] 5. Discuss classification of Distributed Computing. [5] Web-Service 1. Define Web Service. Write characteristics of Web Service. [2] 2. Explain Web Service architecture [3] 3. Discuss advantages of Web Service. [3] 4. Explain Web Service Stack in detail. [5] 5. Explain WSDL in detail. [5] 6. Explain Soap and UDDI in detail. [4] 7. Define SOC and SOA. [2] Introduction 1. Define cloud computing. [1]

[3]

[4]

[4]

[5]

[3]

[3]

# Virtualization

2. Discuss characteristics of cloud computing.

3. Discuss different service models of cloud.

6. Differentiate IaaS and PaaS.

7. Differentiate Saas and PaaS.

4. Explain/Differentiate different deployment models of cloud

5. Explain advantages and disadvantages of cloud computing.

1.	What is Virtual Computing? What does Virtual machine provide?	[2]
2.	How virtual computing is useful?	[3]
3.	Define the following:	
	a. Server Virtualization b. Network Virtualization c. Storage virtualization	ion
4.	Define following:	[2]
	a. System Virtual Machine b. Process Virtual Machine.	
5.	What is Hypervisor?	[1]
6.	Explain Classification of Server Virtualization Techniques in detail.	[7]

<ul><li>7. Differentiate between Type 1 vs Type 2 Hypervisors.</li><li>8. Explain different types of Type 1 Hypervisor in detail.</li><li>9. Differentiate Full Virtualization and Para Virtualization</li></ul>	[5] [5] [4]
SAAS  1. Define SaaS.	<b>[1]</b>
<ol> <li>Define SaaS.</li> <li>Differentiate SaaS vs ASP.</li> <li>Discuss disadvantages of traditional software model.</li> <li>List out and explain SaaS categories.</li> <li>Discuss evaluation of SaaS.</li> <li>Write characteristics of SaaS.</li> <li>Explain advantages and disadvantages of SaaS.</li> <li>Discuss following terms.         <ul> <li>a. Scalability b. Elasticity</li> </ul> </li> <li>Discuss following terms.         <ul> <li>a. Dynamic Provisioning d. Multi-tenant</li> </ul> </li> <li>Explain SaaS simple maturity model by Microsoft Corporation.</li> <li>Explain SaaS model by Forrester Research.</li> </ol>	[1] [3] [3] [2] [4] [3] [4] [4] [5] [5]
IAAS  1. What is IaaS?  2. Explain basic IaaS Characteristics.  3. Discuss features and benefits of IaaS.  4. Discuss virtual machine life cycle.  5. Explain virtual machine provisioning process.  6. Explain different types of VM migration techniques.  7. Differentiate between Hot and Cold migration.  8. Explain algorithm of live migration technique.  9. Discuss advantages and disadvantages of IaaS.	[1] [4] [3] [4] [4] [5] [4] [5] [4]
PAAS  1. Define PaaS. Who are users of PaaS? List out PaaS Vendors.[3]  2. Explain requirements of a PaaS Platform.  3. Discuss Platform-as-a-Service reference model in detail.  4. Explain different PaaS implementations categories.[3]  5. Discuss key characteristics of PaaS.	[4] [5] [4]

## **TOOLS**

1.	Explain Windows Azure platform in detail.[5]	
2.	What is Windows Azure? List out and explain components of it.	[5]
3.	Explain compute component of Windows Azure.	[3]
4.	Explain storage component of Windows Azure.	[2]
5.	Explain fabric component of Windows Azure.	[2]
6.	What is Aneka? Explain features of Aneka.	[4]
7.	Explain Aneka in brief.	[4]
8.	What is AWS ? What is AWS EC2?	[2]
9.	Explain features and benefits of AWS EC2.	[4]
10.	What is Eucalyptus? Explain components of eucalyptus.	[5]
11.	Explain features and functionalities of Eucalyptus.	[5]
12.	Explain the functionalities of cloud sim.	[5]
13.	Discuss the functionalities of GoogleApp Engine.	[5]
14.	What is Openstack? Why to use Openstack?	[3]
15.	Explain the component and services of Openstack.	[5]
16.	List out tools which provide PaaS functionalities and explain any one.	[5]
17.	List out tools which provide SaaSfunctionalities and explain any one.	[5]
18.	List out tools which provide IaaS functionalities and explain any one.	[5]

### **SECURITY**

- 1. Discuss the impact of cloud computing on the governance structure of IT organizations [3]
- 2. If cloud computing is so great, why isn't everyone using it? Discuss. [3].
- 3. Explain security issues in cloud computing. [4]
- 4. What are the security issues in cloud computing? Discuss solutions to security issues. [6-7]
- 5. Explain taxonomy of fear in using cloud. [3]
- 6. Explain threat model and its components of security in detail. [6-7]
- 7. Which types of attackers are in cloud? What are their capabilities and challenges? [6-7]
- 8. How to provide infrastructure security in cloud? Explain in detail. [7]

- Discuss Hadoop Map reduce architecture in brief.
- Explain Google File System architecture in detail
- Discuss advantages and disadvantages of stateless and stateful server
- Explain SaaS model by Forester Research
- Explain SaaS simple maturity model by Microsoft Corporation.
- Discuss Platform.as-a-service reference model in detail
- Explain different PaaS implantations categories. List out key characteristics of PaaS
- Explain Windows Azure platform in details.
- Explain Platform-as-a-Service reference model