



**Galgotias College of Engineering and Technology, Greater Noida**

**Pre-University Test (PUT): Odd Semester 2024 - 2025**

Course/Branch

:MCA

Semester : III

Subject Name

:Cloud Computing

Max. Marks :100

Subject Code

:KCA014

Time : 180min

*CO-1 : Understand the concepts of Cloud Computing, key technologies, strengths and limitations of cloud computing.*

*CO-2 : Develop the ability to understand and use the architecture to compute and storage cloud, service and models.*

*CO-3 : Understand the application in cloud computing.*

*CO-4 : Learn the key and enabling technologies that help in the development of cloud.*

*CO-5 : Explain the core issues of cloud computing such as resource management and security.*

**Section –A # 20 Marks(Short Answer Type Questions)**

Attempt ALL the questions. Each Question is of 2 marks (10 x 2 = 20 marks)

Q. No.	COx	Question Description # Attempt ALL the questions. Each Question is of 2 marks
1	CO1	Define Cloud Computing and mention any two key characteristics of it. (K1)
a	CO1	What are the differences between public and private clouds?(K2)
b	CO2	What is Software as a Service (SaaS)? Provide one example. (K2)
c	CO2	List any two cloud service providers and the services they are known for. (K1)
d	CO3	Name any two cloud-based tools used for project management and briefly describe their purpose. (K2)
e	CO3	What is CRM Management, and how does it benefit businesses when hosted on the cloud?(K3)
f	CO4	What is HLL? Briefly explain. (K1)
g	CO4	What is virtualization, and why is it important in cloud computing?(K2)
h	CO5	Define the role of the Open Cloud Consortium in cloud standardization. (K2)
i	CO5	Explain the concept of testbed in reference to cloud computing. (K2).
j		

**Section – B # 30 Marks (Long /Medium Answer Type Questions)**

Attempt ALL the questions. Each Question is of 6 marks(5 x 6 = 30 marks)

Q2 (CO-1): Explain the evolution of Cloud Computing with emphasis on its relationship with parallel and distributed computing (K3)

OR  
Discuss the architecture of Cloud Computing and explain the role of each layer. (K3)

Q3 (CO-2): Differentiate between Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) with examples (K2)

OR  
What is Monitoring as a Service (Maas)? Discuss its importance with a real-world application. (K2)

Q4 (CO-3): Explain how cloud-based email communication is different from traditional email services. Highlight its advantages. (K5)

OR  
Discuss the role of cloud services in task management and event management. Provide examples of tools used. (K5)

Q.5 (CO-4): Discuss the pros and cons of virtualization in the context of cloud computing. (K4).

OR  
Explain the differences between System Virtual Machines (System VM) and Process Virtual Machines (Process VM) with examples. (K5)

Q.6 (CO-5): Discuss the importance of standards for security in cloud computing and provide examples (K5)

OR  
Explain the system issues for running a typical parallel program in either a parallel or a distributed manner. (K5)

**Section – C #50 Marks (Medium / Long Answer Type Questions)**

Attempt ALL the questions. Each Question is of 10 marks.

Q.7 (CO-1): Attempt any ONE question. Each question is of 10 marks.

a. Compare and contrast Eucalyptus, Nimbus, and OpenNebula as cloud platforms, highlighting their key features and use cases. (K4)  
b. Explain in detail the business models around clouds, such as SaaS, PaaS, and IaaS, with suitable examples. (K5)

Q.8 (CO-2): Attempt any ONE question. Each question is of 10 marks.

a. Discuss the services offered by major cloud service providers such as Google, Amazon, Microsoft, Azure, and IBM. Compare their features and use cases. (K5)  
b. "Salesforce is the world's number one cloud-based CRM platform". Illustrate your answer. (K5)

Q.9 (CO-3): Attempt any ONE question. Each question is of 10 marks.

a. Cloud services provide a collaborative environment for productivity tools such as word processing, spreadsheets, and presentations. Explain this statement with examples of popular cloud-based applications. (K5)  
b. Discuss how social networks and groupware hosted on the cloud enable seamless collaboration among team members. Include examples and use cases. (K4)

Q.10 (CO-4): Attempt any ONE question. Each question is of 10 marks.

a. Describe the architecture and features of virtualization tool VMware. (K6)  
b. What is the difference between process virtual machines, host VMs and native VMs? (K5)

Q.11 (CO-5): Attempt any ONE question. Each question is of 10 marks.

a. What is Google App Engine? Which type of cloud service the Google AppEngine provides? Explain. (K3)  
b. Explain how Hadoop is used in cloud environments for big data processing. (K3)