



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Subject: Cloud Computing

Subject Code: BCS601

Module 1

Q No.	Questions	M	BL	CO'S
1.	Explain high-Performance and high-Throughput systems. What are its main differences. Discuss various applications of HTC and HPC.	6	L2	CO 1
2.	Briefly explain the evolution of IoT and Emerging technologies.	6	L2	CO 1
3.	Explain with a neat diagram the interaction between a CPU and GPU in performing parallel executions.	6	L2	CO1
4.	Explain native VM, Hosted VM and Dual-mode VM in detail with diagrams.	6	L2	CO1
5.	Explain the 4 VM primitive operations in detail with diagrams and examples.	8	L2	CO1
6.	Explain the classification of Parallel and distributed computing systems.	4	L2	CO1
7.	Which are the two overlay networks in P2P systems. Explain its differences with a neat diagram	6	L2	CO1
8.	What is SOA? Explain its evolution with a neat diagram.	6	L2	CO1
9.	Explain Public, Private, Hybrid and Managed cloud in detail.	8	L2	CO1
10.	Explain Amdahl's law and Gustafson's law with expression and example.	5	L2	CO1

Module 2

QNo.	Questions	M	BL	CO'S
1.	Discuss various levels of Virtualization implementation with neat diagram and examples.	8	L2	CO2
2.	What is Virtualization? Explain the types of Virtualizations with examples.	4	L2	CO2
3.	Explain OS level Virtualization in detail.	5	L2	CO2
4.	Explain virtualization on Linux platforms with examples.	4	L2	CO2
5.	Explain Library-level virtualization with example.	3	L2	CO2
6.	Explain vCUDA architecture of General-purpose GPUs with diagram	5	L2	CO2
7.	Explain the Xen Architecture with a neat diagram.	5	L2	CO2
8.	Explain para-virtualization in x86 OS architecture with a neat diagram.	5	L2	CO2
9.	Explain host-based virtualization and para-virtualization structures in detail with diagrams.			
10.	Explain host-based virtualization with a neat diagram.	5	L2	CO2
11.	With a neat diagram, explain the VMware ESX server for para-virtualization.			CO2
12.	Briefly explain hardware-assisted virtualization in Intel CPU with a neat diagram.	5	L2	CO2
13.	Explain memory Virtualization. Discuss the two-level memory mapping procedure.	6	L2	CO2
14.	What is I/O Virtualization? Which are the three ways in which I/O virtualization can be implemented?	5	L2	CO2
15.	Explain I/O virtualization in VMware workstation.	5	L2	CO2
16.	What are physical and virtual clusters? Explain with a net diagram.	6	L2	CO2
17.	Explain live migration process of a VM from one host to another with a neat diagram.	6	L2	CO2
18.	Analyse the live migration of VMs between two Xen-enabled hosts	6	L3	CO2
19.	Explain network migration in brief.	5	L2	CO2
20.	Explain server consolidation in data Center	4	L2	CO2
21.	What are some of the side effects of server virtualization.	4	L2	CO2
22.	Name few platforms used for OS virtualization in Data centers.	4	L2	CO2
23.	Explain Eucalyptus Cloud	5	L2	CO2
24.	Explain some of the techniques used for virtual cluster insulation and VM isolation.	6	L2	CO2