

BHAI GURDAS INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Computer Science and Engineering

LESSON PLAN

Subject Name: - Cloud Computing

Subject Code: - BTCS 612-18

Year: - Jan-May 2023

Semester: - 6th CSE

Lecture No.	Unit	Date/ Week	Topic	Teaching Aids	Reference
L-1	1	10 days	Introduction to the subject and Unit-1	chalk, board- dustor chalk, board- dustor	Notes, text- book,
L-2			Definition of cloud, characteristics of cloud		
L-3			Historical developments & challenges ahead, the vision of cloud computing		
L-4			Driving factors towards cloud		
L-5			Comparing grid with utility computing		

L-6			Cloud computing vs Grid Computing		
L-7			Cloud Computing vs Cluster Computing and Utility Computing		
L-8			Types of workload patterns for the cloud		
L-9			IT as a service		
L-10			Applications of cloud computing		
L-11	Unit-2	8 days	Introduction to virtualization		
L-12			Virtualization techniques		
L-13			Characteristics of virtualization		

L-14			Pros and Cons of virtualization Technology		
L-15			Hypervisors, Types of hypervisors		
L-16			Multitenancy		
L-15			Application programming interfaces (API)		
L-16			Elasticity and scalability		
L-17			Cloud service models		
L-18			Cloud service models		
L-19	Unit-3		Infrastructure as a service		
L-20			Infrastructure as a service (IaaS)		
L-21			Platform as a service (PaaS)		
L-22			Platform as a service (PaaS) architecture--details and example		
L-23			Software as a service (SaaS)		
L-24			Software as a service (SaaS) architecture--details and example		
L-25			Comparison of cloud service delivery models		
L-26			Cloud deployment models		
L-27	Unit-4		Public clouds		

L-28			Private clouds		
L-29			Hybrid clouds		
L-30			Community clouds		
L-31			Difference Between all the Clouds		
L-32			Migration paths for cloud		
L-33			Selection criteria for cloud deployment		
L-34			Security in cloud computing		
L-35			Understanding security risks		
L-36			Privacy and security		
L-37			Principal security		
L-38	Unit-5		Internal security breaches dangers to cloud computing computing		
L-39			User account and Service hijacking		
L-40			User account and Service hijacking		
L-41			Measures to reduce cloud security breaches		
L-42			Case Study Amazon Web Services		
L-43			Case Study Microsoft Azure		
L-44			Case Study Google Web Services		

L-45			Comparison of existing Cloud platforms /Web Services.		
L-46			Comparison of existing Cloud platforms /Web Services.		