

Charotar University of Science & Technology

Chandubhai S.Patel Institute of Technology

K.D. Patel Department of Information Technology

Subject Name: Advanced Computing
Subject Code: IT442

Semester: B.Tech VII
Academic Year: 2019-20

Practical List

Sr.No.	Date	Aim of the Practical	Page No	Sign
1.		Setup High Performance MPI Cluster using MPICH library and running MPI Application Program (minimum two nodes)		
2.		Build a Java-based service that exposes an API using the gRPC framework, and then writing a client to use the generated gRPC client-side stub.		
3.		Set Up Hadoop Cluster and run news-paper word count program using Map-Reduce.		
4.		Creating and using Virtual Machine using Xen Hypervisor (Private Cloud).		
5.		Implementing Load balancing/High Availability for Web Application using Amazon Web Services (AWS)		
6.		Web-application deployment on EC2 using AWS CodeDeploy & S3 services.(with CI/CD)		
7.		Implement Docker Containers.		
8.		Implement Kubernetes Cluster.		
9.		Create your own website in cloud and perform security testing on it.		
10.		Case Study and Presentation of Framework/Tool/Project.		

