

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		L	T	P	L	T	P	Total
CPL801	Cloud Computing Lab	--	--	2	--	--	1	1
		Examination Scheme						
		ISE		ESE			Total	
				Practical	Oral			
40		-		20		60		

Pre-requisite Course Codes	-	
At end of successful completion of this course, student will be able to		
Course Outcomes	CO1	Understand fundamentals of cloud computing and Summarize various cloud delivery models.
	CO2	Create and run virtual machines on open source OS.
	CO3	Implement Infrastructure, Storage as a Service.
	CO4	Install and appreciate security features for cloud.

Exp. No.	Experiment Details	Ref.	Marks
1	<p>Title: Study and implementation of Infrastructure as a Service.</p> <p>Concept: Infrastructure as a Service.</p> <p>Objective: In this module student will learn Infrastructure as a Service and implement it by using OpenStack.</p> <p>Scope: Installing OpenStack and use it as Infrastructure as a Service.</p> <p>Technology: Quanta Plus /Aptana /Kompozer</p>	1,4	5
2	<p>Title: Implementation of identity management.</p> <p>Concept: Identity Management in cloud</p> <p>Objective: this lab gives an introduction about identity management in cloud and simulate it by using OpenStack</p> <p>Scope: installing and using identity management feature of OpenStack</p> <p>Technology: OpenStack</p>	1,4	5
3	<p>Title: Study and installation of Storage as Service.</p> <p>Concept: Storage as Service (SaaS)</p> <p>Objective: is that, students must be able to understand the concept of SaaS, and how it is implemented using ownCloud which gives universal access to files through a web interface.</p> <p>Scope: is to installation and understanding features of ownCloud as SaaS.</p> <p>Technology: ownCloud</p>	3	5
4	<p>Title: User Management in Cloud.</p> <p>Concept: Administrative features of Cloud Management, User Management</p> <p>Objective: is to understand how to create, manage user and group of users accounts.</p> <p>Scope: Installing and using Administrative features of ownCloud.</p>	3	5



Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India
(Autonomous Institute Affiliated to University of Mumbai)

	Technology: ownCloud		
5	Title: Study and implementation of Single-Sign-On Concept: Single Sign On (SSO),openID Objective: is to understand the concept of access control in cloud and single sign on (SSO), Use SSO and advantages of it, and also student should be able to implement it. Scope: installing and using JOSSO Technology: JOSSO	2	5
6	Title: Write a program for web feed Concept: Web feed and RSS Objective: this lab is to understand the concept of form and control validation Scope: Write a program for web feed. Technology: PHP, HTML	5	5
7	Title: Mini project. Concept: using different features of cloud computing creating owncloud for institute, organization etc. Objective: is student must be able to create own cloud using different features which are learned in previous practices. Scope: creating a cloud like social site for institute. Technology: any open system used for cloud		10
Total Marks			40

References:

- [1] Gautam Shroff, "Enterprise Cloud Computing" Cambridge, 2010.
- [2] Ronald Krutz and Russell Dean Vines, "Cloud Security", Wiley - India, 2010, ISBN: 978-0-470-58987-8.
- [3] Aditya Patawar, "Getting Started with OwnCloud", Packt Publishing Ltd, 2013.
- [4] www.openstack.org
- [5] <https://www.rss.com/>