Internal Assessment Plan

The 50 Marks of Internal Assessment is categorized as follows:

1. Public Cloud [5 Marks]
2. Virtualization Lab [5 Marks]
3. Web-Application on VMs [ 5 Marks]
4. Cloud Software – Report and Presentation [15 Marks]
5. Cloud-Computing Open Source Tools - Usage and Presentation[10 Marks]
6. Data Center Networking with Mininet [5 Marks]
7. Objective test Questions [5 marks]

# Public Cloud

TODO: Register with any open public-cloud offerings, and Share your experience either via a PPT or a Word File. The experience should mainly include the features of the cloud offering. Example sites: Cloud Foundry, CLoudify, OpenShift, Stackato, WSO2 Stratus.

Output: PPT or Word file.

# Virtualization Lab

TODO:

**Virtual Box:** Download and Install Oracle Virtual Box. Then, create at least two virtual machines.

**OpenSource:** Install and create virtual machine on **KVM** (Ubuntu).

Output: Demonstration.

# Web-Application on VMs

TODO: Run any web-application on the VMs created in the previous exercise.

Output: Demonstration

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TODO: Each and every student will study one of the following Cloud software. They will study this software and prepare a report on the same. They will also prepare a presentation (PPT) of the same.

1. **AppScale**
2. DigitalOcean
3. Eucalyptus
4. Force.com
5. GoGrid
6. Google App Engine
7. Google Compute Engine
8. Heroku
9. HP Converged Cloud
10. IBM SmartCloud Services
11. Microsoft Azure
12. **Nodejitsu**
13. OpenShift
14. OpenStack
15. Rackspace
16. **Skytap**
17. Softlayer
18. VMware
19. OpenNebula
20. OpenQRM
21. Nimbus
22. Jelastic
23. Cloud Stack
24. Cloud Foundry
25. Scalr

Output: Report as Word file and Presentation as PPT.

# Cloud Computing Opensource Tools:

TODO: Each and every student will work (DOWNLOAD, INSTALL and USE) one of the following Cloud tools. They will demonstrate the same to all.

1. **Chef**,
2. Puppet,
3. RabbitMq,
4. MongoDB,
5. Riak,
6. Ansible,
7. Zabbix,
8. CFEngine,
9. Saltstack,
10. OpsView,
11. Hadoop,
12. **ProcessMaker,**
13. OpenKM,
14. oVirt,
15. Foreman,
16. **Libvirt-tools,**
17. Nagios,
18. OpenNMS,
19. Ubuntu JuJu,
20. Jenkins,
21. Ganglia,
22. LogStash,
23. iPerf
24. **Snorby Threat Stack**
25. **Snort**

Output: Demonstration

# Data Center Networking with Mininet

## TODO:

The mininet image will be given and students will run this as VM in the installed (in exercise 2) virtualization environment. Students will run sample scenarios.

## Output:

Demonstration

# Objective Test

There will be an objective time test questions.