

COSA Assignments

Windows

This assignment assumes that you have already installed Windows Server, Assigned IP address , Set the timezone and set the computer name.

Q.1. Add 2 hard disks to a Windows Server and configure a Mirrored volume. Assign G: to this drive. Create a folder by name demo in it. Create a file test.txt inside this demo folder. Type something in this file. Then take one of the hard disk offline. Display that mirrored volume is still available.

Q.2. Add 3 hard disks to a Windows Server and configure a RAID 5 volume. Assign H: to this drive. Create a folder by name demo in it. Create a file test.txt inside this demo folder. Type something in this file. Then take one of the hard disk offline. Display that RAID5 volume is still available.

Q.3. Install Windows Active directory to create a new forest and a new domain by name demo.lab. Once the server restarts create an OU by name ditiss. Create a user by name student1 inside this OU. Allow this user to login only between 9am to 7 pm from Monday to Friday. On Saturday Allow this user to logon from 9 am to 2 pm. Do not allow user to logon on Sunday.

Q.4. Install Windows Active directory to create a new forest and a new domain by name demo.lab. Once the server restarts logon as an administrator. Install and configure DHCP server to assign IP addresses to 30 clients. Configure any address as router. Keep this server address as the DNS server address. Display that the client is able to receive IP address from your server.

Q.5. Install Windows Active directory to create a new forest and a new domain by name demo.lab. Once the server restarts logon as an administrator. Install IIS web server. Create 3 web sites which will run on same IP address and port 80. The first website will be access by name www.demo.lab. The first website will display the message "Welcome to demo.lab". The second website will be accessed by name www.myinfo.lab . This website will display your name. The third website will be accessed by name www.mypn.lab . This website will display your PRN number.

Q.6. Install Windows Active directory to create a new forest and a new domain by name demo.lab. Once the server restarts logon as an administrator. Install DHCP server. Install and configure WDS server to install Windows Server operating system. Start the client and display that the WDS installation starts.

Q.7. Install Windows Active directory to create a new forest and a new domain by name demo.lab. Once the server restarts logon as an administrator. Install FSRM. Create a folder by name assignments. Share the folder. Configure FSRM to apply 15GB hard quota on this folder. Do not allow users to store avi,bmp,mp3,jpg,png,mp4,zip,rar,tar files. Also configure classification property by name secret of type yes/no. The value will change to yes if the file contains words like hacking,auditing and report.

Linux

Q.1. Attach a 20 GB hard disk to Linux virtual machine. Using fdisk create a partition of 15 GB and second partition of 5 GB. Mount the first partition in /faculty directory. Mount the second partition in /students directory. Also add fstab entry for both the partitions.

Q.2. Attach 2 20GB hard disks to the virtual machine. Create a volume group by adding these 2 hard disks. Then create a logical volume of 12 GB. Format it. Create another logical volume of 20 GB inside this volume group. Format it. Mount the first volume inside /data directory. Mount the second volume inside /backup directory. Create some files in both the directories. Increase the second volume by 8 GB to make it 28GB. Show with df -khT and lvs.

Q.3. Install and configure DHCP server to assign IP addresses to 30 clients. Configure any address as router. Keep this server address as the DNS server address. Display that the client is able to receive IP address from your server. Provide reservation to the client. Assign any IP address outside the range given.

Q.4. Install httpd web server. Create 2 web sites which will run on same IP address and port 80. The first website will be accessed by name www.myinfo.lab . This website will display your name. The second website will be accessed by name www.mypnrn.lab . This website will display your PRN number. Use hosts file as DNS. Display result with the curl.

Q.5. Install DNS server. Configure a domain by name demo.lab. Create following records in it.

www - 192.168.20.10

exam - 192.168.20.11

dbserver- 192.168.20.12

dbsrv - same as dbserver (create CNAME record)

Create a reverse lookup zone for the network 192.168.20.0 with subnet mask as 255.255.255.0. Create following PTR records.

10 - www.demo.lab

11 - exam.demo.lab

Q.6. Install and configure samba service. Create a folder by name /linux-data. Create a user by name sam. Make the sam user owner of this /linux-data . Create a samba password for this user. Share this /linux-data directory with Windows machine. Access this folder from a Windows machine and create a file in this folder from Windows machine as sam user.

Q.7. Install squid service. Configure squid such that from Windows system block websites - www.amazon.com, www.flipkart.com, www.myntra.com , www.ajio.com . Also block websites containing words - ipl, iplt20, ipl20, hacking, movies.