**Nume:**

**Prenume:**

1. What is command to see the current disks present on the server
   1. Fdisk –k
   2. Fdisk /dev/sda
   3. Fdisk –l
   4. Df –h
   5. Du –sh /
2. With what option do you print the disks inside the fdisk console ?

3. A “Logical Volume Manager” helps in

a. Virtualizing storage.

b. provide direct access to the underlying storage.

c. Manage disk space efficiently without having to know the actual hardware details.

d. Both a & c

e. None of the above

1. How many primary partition can be created ?
   1. 1
   2. 2
   3. 3
   4. 4
   5. 5
2. How many extended partitions can be made ?
   1. 1
   2. 2
   3. 3
   4. 10
   5. 16
3. What is the difference between a disk and a filesystem ?
4. With what command can you see the filesystems mounted on the server ?
5. How do you make the filesystems mount automatically at boot ?
6. Which one is not a unix filesystem ?
   1. Ext2
   2. Xfs
   3. Ntfs
   4. ufs
7. Physical Volumes are  
   a. The space on a physical storage that represent a logical volume.  
   b. Disk or disk partitions used to construct logical volumes.  
   c. A bunch of disks put together that can be made into a logical volume.  
   d. None of the above
8. What is the command to create physical volumes ?
9. In order to view physical volumes the following command must be executed:
   1. Fdisk –l
   2. Vgs
   3. Pvs
   4. Pvscan
   5. C and D

13. Which of the following are true. Logical Volumes  
a. Can span across multiple volume groups.  
b. Can span across multiple physical volumes.  
c. Can be constructed only using a single physical disk.  
d. None of the above

14. Which of the following statements are true: ( multiple answers )  
a. LVM is storage independent whereas a RAID system is limited to the storage subsystem  
b. LVM provides snapshot feature  
c. With LVM we can grow volumes to any size  
d. RAID system can provide more storage space than a LVM

15. What are the minimum number of disks needed for a raid 5:

a. 1

b. 2

c. 3

d. 4

16. Concatenation is the technique of  
a. Adding physical volumes together to make a volume group  
b. Filling up a physical volume completely before writing to the next one in a logical volume  
c. writing a block of data onto one disk and then a block onto another disk in an alternate fashion  
d. Increasing the size of a volume by adding more disks

17. Which of the following is not a feature of LVM  
a. Independent of disk location  
b. Concatenation and striping of storage systems  
c. protection against disk failures  
d. snapshot capability

18. The standard value for a PE(physical extent ) is:

a. 2Mb

b. 4Mb

c. 8Mb

c. 16Mb

19. A logical Extent(LE) and Physical extent(PE) are related as follows ( multiple answers )  
a. PE resides on a disk, whereas LE resides on a logical volume  
b. LE is larger in size than a PE  
c. LE’s are unique whereas PE’s are not  
d. Every LE maps to a one and only one PE

20. List the following terms in order: filesystem, physical volume, logical volume, physical disk, disk partitioning, volume group

1

2

3

4

5

6

21. What is the difference between pvs, vgs and lvs ?

22. In order to create a 200M logical volume on vgTest the command is:

a. lvcreate –l 200M –n lv\_test vgTest

b. lvextend –l 200M –n lv\_test vgTest

c. lvcreate –L +200M –n lv\_test vgTest

d. lvcreate –L 200M –n lv\_test vgTest

23. How do you resize and filesystem that has a logical volume under it ?

Commands/Steps:

1.

2.

24. Please explain the difference between a RAID 0 concat and RAID 0 stripe:

25. Why is a RAID1 mirror redundant ?

26. Please explain the concept behind a RAID5 configuration:

27. What command should be used in order to fix a corrupt volume group:

a. vgcfgrestore

b. vgcfgfix

c. vgcfgrepair

d. vgrestore

28. What is the main configuration file for lvm ? ( full path )

29. Please explain the following line present in lvm configuration file:

volume\_list = [ “vg01”, “vg02” ]

30. Please explain the following line present in lvm configuration file:

filter = [ "a|^/dev/hda$|", "r/.\*/" ]

31. What does partprobe do:

a. forces the kernel to reread the partition table since

b. creates a new partiton

c. initializes the partition table

d. forces the lvm to reread the physical devices

32. The following command: mdadm -vC /dev/md0 --raid-devices=2 /dev/sda5 /dev/sda6 --level=1

a. creates md0 device within the lvm

b. creates a raid 1 device md0

c. initializes a raid 2 device md0

d. none of the above

33. What is swap ?

34. What is the difference between ext2 and ext3 filesystems ?

35. The command to adjust tunable filesystem parameters on ext2/ext3/ext4 filesystems:

a. tunefilesystem

b. mkfs

c. tune2fs

d. dumpfs

36. To print the super block and blocks group information for the filesystem present on a device the following command must be used: ( multiple answers )

a. dump2fe

b. tune2fs

c. dumpe2fe

d. none of the above

37. In order to see the inodes ( total and free ) of a mounted filesystem the following command must be used:

a. du –si /

b. tune2fs -inodes

c. df –i

d. find / -name inodes –print;

38. Journaling is preferred for  
a. Faster file system recovery  
b. Faster write operation  
c. Storing logs  
d. Storing metadata

39. Examples of Journaling filesystem  
a. Ext2  
b. Ext3  
c. UFS  
d. JFS

40. Defragmentation is the process of  
a. physically reorganizing the contents of the disk to store the pieces of each file close together and contiguously.  
b. Create extra space in filesystem  
c. Resizing the filesystem.  
d. None of the above.