**Linux Exam**

**1. What are Open Source softwares.**

Linux

**2. What is a swap space?**

Virtual memory

**3. Syntax of any Linux command is:**

“command” , “arguments”

**4. Diffrence between RAM and swap memory?**

Virtual memory is a combination of RAM and disk space that running processes can use. Swap memory is the portion of virtual memory that is on the hard disk, used when RAM is full.

**5. Command to create soft link?**

ln –s

**6. How do you change permissions under Linux?**

chmod

**7. How do you list partitions under Linux?**

fdisk –l

**8. How do you list mount points in linux?**

df – h , df –k

**9. How to export enviornmental variables in Linux for user “devops”?(username)**

(nexus) export RUN\_AS\_USER=devops

**10. How to check RAM and swap memory size usage in Linux?**

Free or top

**11. What is symbol of output redirection**

**>**

**12. How do you redirect all the output to a file, including standard errors.**

redirect stderr (standard error) to a file: command 2> errors.txt.

redirect both stderr and stdout (standard output): command &> output.txt.

**13. Command to find all the PID’s of httpd process**

ps –ef|grep httpd

**14. Write a command that will look for files with an extension “.xyz” and delete it.**

rm –rf\*

**15. How to make sure that vsftpd process starts after system starts.**

service vsftpd status

**16. How to install software with all the dependencies in Ubuntu & centos systems.**

yum install apt-get – Ubuntu

yum install - centos

**17. What runlevel will start the system in graphical mode?**

* 0 – System halt *i.e* the system can be safely powered off with no activity.
* 1 – Single user mode.
* 2 – Multiple user mode with no NFS(network file system).
* 3 – Multiple user mode under the command line interface and not under the graphical user interface.
* 4 – User-definable.
* **5 – Multiple user mode under GUI (graphical user interface) and this is the standard runlevel for most of the LINUX based systems.**
* 6 – Reboot which is used to restart the system.

**18. What is the command to find the current run level?**

init

**19. Write a cronjob entry to run a backup script at 10:30 PM from Monday to Friday?**

30 22 1-5 \* \* sumidha.txt

**20. What is the command to find the current load average of the system?**

Uptime or top

**21. Explain all the fields for user devops from /etc/passwd file**

**devops:x:1002:1002:Lab\_User:/home/devops:/bin/bash**

username:password:groupid:userid:directory:path:systemrunning

**23. Give example of type 2 and type 1 hypervisor?**

**24. Diffrence between DNS and DHCP server?**

Domian name server – sends DNS to ip address

DHCP- Dynamic host configuration protocol – it is a protocol assigns ip to the host

**25. Default ports for FTP, DNS, Telnet, HTTP & SSH?**

HTTP – 80

SSH – 22

FTP – 20,21

DNS – 53

Telnet- 23

**26. Command to install rpm and dpkg package.**

**27.What is vagrant?**

**28. What is the default synced directory for vagrant vm?**

**29. How to make your script executable for the owner and the group?**

Chmod 774

**30. Diffrence between ext2 and ext3 filesystem.**

**31. How to check the ip address of your system ?**

ifconfig

**32. How To change the password of user from the Command Line ?**

passwd

**33. What is name of first process in linux and its PID?**

ppid 1

**34. Command to check all the running processes?**

ps -ef

**35. Find a user root info from /etc/passwd file and display two lines after that?**

To find all the user details

**36. Search content elephant and replace it with rhino from a file named animals.txt.**

**Sed -I ‘s/elephant /rhino/g’ animals.txt**

**37. Command to add user to the group?**

Adduser usermod

**38. How many IP addresses are available to use from CIDR block /24 and /16?**

**39. What is first and last usable ip address for network ranges 172.16.1.0/24?**

**40. What is the purpose of /etc/hosts file?**

All Ip addresses are available

**41. How to restart ssh service in centos and ubuntu OS?**

Service sshd restart

**42.How to reboot linux machine with init command?**

Sudo reboot init **6**

**43. Command to copy file /tmp/logs\_backup.zip from local system to a remote server which has ipaddress 192.168.2.84 at /home/vagrant/ location?**

Secure copy scp backup.zip vagrant@192.168.2.84:

**44. sudo -i command is used for what purpose?**

Root superuser (runs the programs with the security privileges of another user.

**45. Command to zip and compress directory named apache\_logs.**

**tar**

**46. What is PPID?**

Parent process ID. In addition to a unique proces**s** ID, each process is assigned a parent process ID.

**47. How to find file type in linux, like normal file, directory, block file, links etc?**

**find / -name naresh**

**48. Describe the root account.**

One identity that has complete access to all AWS services and resources in the account

**49. How to list all the interfaces and its ip address in Linux?**

ifconfig

**50.What is /etc directory used for in Linux?**

To find all the user details &password

**51. What is /etc/shadow file used for in linux?**

Encrypted passwords are available

**52. How to check if file exists on file system?**

existsSync()

**53. What is difference between vagrant and virtualbox?**

Vagrant is software that is used to manage a development environment. VirtualBox is basically inception for your computer and VirtualBox is used to run entire sandboxed operating systems within your own computer.

**54. What is AWS?**

Amazon web services. It is a on demand cloud computing platform. Provides a mixture as infrastructure as a service (IaaS), platform as a service (PaaS) and packaged software as a service (SaaS) .

**55. What is IAM and its purpose?**

Identity and access management. IAM is a web service that helps you securely control access to AWS resources

**56. What is EC2 service used for?**

EC2 provides scalable computing capacity in the AWS cloud. It enables the organizations to develop and deploy applications faster, without needing and hardware upfront

**57. What are AMI’s?**

**Amazon machine image**

Virtual application which is used to create a virtual machine within the Amazon elastic compute cloud.

**58. What is diff between inbound and outbound rules in SG?**

Inbound rules control the incoming traffic to your instance, and outbound rules control the outgoing traffic from your instance.

**59. What is NAT**

Network address translation

NAT translates the IP addresses of computers in a local network to a single IP address. This address is often used by the router that connects the computers to the Internet.

**60. What is subnet?**

Subdivision of an ip network