* **Question 1**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the name of the standard Linux shell? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | BASH |  |  |  | | --- | --- | | Response Feedback: | Good work | |  |  |  |

* **Question 2**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | Which of these shells were predecessors of the BASH shell? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | B.  csh, sh, ksh | |  |  |  |

* **Question 3**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | Who created the csh?  (C shell - same guy who created vi) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Bill Joy | |  |  |  |

* **Question 4**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the correct order of files for your system to process shell variables upon startup and through the login process? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | D.   * + /etc/profile   + ~/.bash\_profile or ~/.bash\_logon   + ~/.bashrc | |  |  |  |

* **Question 5**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What profile file is processes on a non-login? (when you launch a new terminal window?) (give the absolute path using ~) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | ~/.bashrc | |  |  |  |

* **Question 6**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | How can you display your system path from the command line? (Give the **command** and then **variable**) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | echo $PATH | |  |  |  |

* **Question 7**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What file would you edit in order to change your default system path permanently? (give the absolute path using ~) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | ~/.bash\_profile | |  |  |  |

* **Question 8**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What does your system path variable $PATH do? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | B.  The PATH variable holds a list of locations on the sytem where system executables are stored.  Every  command that is typed at the commandline is parsed and the system looks for a filename match in all the locations that are in the PATh variable. | |  |  |  |

* **Question 9**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What are the 3P's of Linux Problems? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | B.  Path, Permission, dePendencies |  |  |  | | --- | --- | | Response Feedback: | Good work - did you experience any of the 3P's this semester? | |  |  |  |

* **Question 10**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the two character code and path to the bash interpreter  in the first line of a shell script to tell the system to use the BASH interpreter? (The first line of every BASH shell script)  Assume that bash in is located at /bin/bash for this exercise. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | #!/bin/bash | |  |  |  |

* **Question 11**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What character is used to make a comment in a shell script? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | # | |  |  |  |

* **Question 12**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | Shell scripts always have to be written in BASH or can they be written in other languages such as Python, Perl, or Ruby. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | True | |  |  |  |

* **Question 13**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the difference between these commands:   mkdir /root/mydir; cp /etc/hosts /root/mydir  mkdir /root/mydir && cp /etc/hosts /root/mydir |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | III.  ; means that the first command will execute and then the second command will execute regardless if the first command is successful.  && means that the second command will only execute if the first command succesfully executes |  |  |  | | --- | --- | | Response Feedback: | Good detective work | |  |  |  |

* **Question 14**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the proper syntax to assign a shell variable a value in BASH? ( VAR is the name of the variable and x is the value of the value.) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | VAR=x | |  |  |  |

* **Question 15**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | It is ok to put a space when assigning a shell varialbe  Example: $PI = 3.14159 |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | False | |  |  |  |

* **Question 16**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What command and options can you use to see all the processes that are running on your system? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | D.  ps -ef | |  |  |  |

* **Question 17**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | On older Linux systems using SysVInit the init demon was assigned PID 1.  In Fedora 20 what process now has PID 1? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | C.  systemd |  |  |  | | --- | --- | | Response Feedback: | Lennart Poettering.... | |  |  |  |

* **Question 18**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | Name the two major**families** of Linux distributions that all current distros descend from |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | B.  Redhat & Debian | |  |  |  |

* **Question 19**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | In the bash shell what is the character shortcut to re-execute the previous command you just executed? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | !! | |  |  |  |

* **Question 20**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What key on the keyboard preforms auto-complete in the bash shell? (use all caps) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | TAB | |  |  |  |

* **Question 21**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What command would you use to change a file that is 644 to give it (Owner only) permission to execute?  (Assume the file name is finalanswers.txt and you are in that directory and you have correct permissions (no tricks) (Use numbering not +x) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | chmod 744 finalanswers.txt | |  |  |  |

* **Question 22**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | The control structures in BASH programming are different in concept from C, C++, and Java control structures. |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | False | |  |  |  |

* **Question 23**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | this is a valid if statement in BASH:  if [ $# -eq 0 ]  then      echo "Not enough arguments!"  fi |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | True | |  |  |  |

* **Question 24**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | In a Bash shell script what does the shell variable $# tell you? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | C.  The number of positional parameters passed to a shell script | |  |  |  |

* **Question 25**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | Who created systemd? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | D.  Lennart Poettering | |  |  |  |

* **Question 26**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | SysVInit has runlevels - what is the systemd equivillent? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | targets | |  |  |  |

* **Question 27**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the command that is used to manage services under systemd?  (hint under SysVInit it was the service command) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | systemctl | |  |  |  |

* **Question 28**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What does the command dmesg do? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | A.  Show out put of the system log (/var/log/messages) without needing sudo permissions | |  |  |  |

* **Question 29**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | In the kill commmand what SIG would you issue to restart a process and have it reread a config file?   Give the kill command and the number of the correct SIGNAL) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Kill -1 SIGHUP | |  |  |  |

* **Question 30**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | In the kill commmand what SIG would you issue to stop a process (equivilent of ctrl+C) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Kill -2 SIGHNT | |  |  |  |

* **Question 31**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | In the kill commmand what SIG would you issue to stop a zombie process that is refusing to accept any signals (ungracefully) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | Kill -9 SIGKILL | |  |  |  |

* **Question 32**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | /etc/hostname file and function was replaced by what ctl in systemd? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | hostnamectl | |  |  |  |

* **Question 33**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the location of all the network configuration files in a Fedora system? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | /etc/sysconfig/network | |  |  |  |

* **Question 34**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the default filesystem used on a majority if Linux distros today? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | ext4 | |  |  |  |

* **Question 35**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the default filesystem used on RHEL 7 and why? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | XFS - it is designed to handle larger files and larger amounts of storage better by design than ext4 | |  |  |  |

* **Question 36**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the default file system used on USB drives and why? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | A.  FAT - because it is a standard and compatible on every operating system | |  |  |  |

* **Question 37**

0 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Incorrect | What command do you use to add a filesystem to your Linux Distro (hint think carrying large tape reels) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | A.  add | |  |  |  |

* **Question 38**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | Every time a system boots is "mounts" all the system partitions:  /  /boot  swap  What configuration file holds this information and the fielsystem mappings to devices? (just the location of the file) |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | /etc/fstab | |  |  |  |

* **Question 39**

0 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Incorrect | What command would let you format a partition with etx4 file system? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | mkfs -t ext | |  |  |  |

* **Question 40**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | The openSSH suite replaces what set of insecure tools? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | A.  telnet, rcp, rsh, sftp | |  |  |  |

* **Question 41**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What does the OpenSSH suite use to secure communication? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | C.  Public/Private key encryption | |  |  |  |

* **Question 42**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | OpenSSH suite came from what operating system in the year 1999? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | C.  OpenBSD | |  |  |  |

* **Question 43**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the correct syntax for logging in remotely to an SSH server? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | A.  [username@hostname](mailto:username@hostname) | |  |  |  |

* **Question 44**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | The password Tr0ub4dor&3  is an easy password for humans to remember and hard for computers to crack |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | False | |  |  |  |

* **Question 45**

0 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Incorrect | What is the command to generate a new RSA keypair? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | ssh-keygen | |  |  |  |

* **Question 46**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What command is used to transfer your public/private key identity to a remote server for password-less authentication (just the command)? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | ssh-copy-id | |  |  |  |

* **Question 47**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the name of the currently most common webserver on Linux? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | B.  Apache | |  |  |  |

* **Question 48**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the command from the commandline would you use to install the Apache webserver on Fedora 20 (assume sudo)? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | sudo yum install httpd | |  |  |  |

* **Question 49**

1 out of 1 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | What is the systemctl command to enable the Apache webserver service everytime the system boots (assume sudo)? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | sudo systemctl enable httpd.service | |  |  |  |

* **Question 50**

2 out of 2 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
| Correct | Where is the location of the Apache webserver error\_log? |  |  |  |
| |  |  | | --- | --- | | Selected Answer: | /var/log/httpd/error\_log | |  |  |  |