

19W CST8177 Midterm

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Name: _____

Circle Section: CST8177-010 CST8177-020

Date: _____

On your Scantron sheet

1. Enter your exact **AC SIS** Full Name with last name first into the round bubbles of the LAST NAME and FIRST NAME fields. Write your name in letters above the filled-in bubbles in the spaces provided so that your instructor can read it.
2. Enter your Student Number, filling in both the bubbles and writing the digits above the numbers in the spaces provided so that your instructor can read it.
3. Fill in only one answer bubble for each question for the Multiple Choice and True/False sections of the test and then answer the short answer questions on this test paper.

Multiple Choice (40 marks)

Please answer the following on the Scantron sheet provided. You will receive one mark for each question answered correctly.

1. You are writing test **A**, enter that value for answer 1 in your scantron sheet
2. Which directory contains the files needed to boot the system
 - a. /var
 - b. /etc
 - c. /opt
 - d. /run
 - e. **/boot**
3. Which command is used to move to the system state defined by 'graphical.target'?
 - a. stopx
 - b. **systemctl isolate graphical.target**
 - c. systemctl isolate multi-user.target
 - d. systemctl start graphical.target
 - e. systemctl stop multi-user.target

4. What command would you use to install a package called "tcsh" with yum?
 - a. yum search tcsh
 - b. yum install tcsh
 - c. yum install package=tcsh
 - d. yum -install tcsh
 - e. yum update tcsh

5. Which of the following process is considered the first, or root, process on CentOS:
 - a. start
 - b. systemd
 - c. rootd
 - d. syslogd
 - e. SysVinit

6. What command can you use to list what units must be started before the GUI can be started?
 - a. systemctl show-dependencies multi-user.target
 - b. systemctl show-dependencies graphical.target
 - c. systemctl list-dependencies multi-user.target
 - d. systemctl list-dependencies graphical.target
 - e. systemctl isolate multi-user.target

7. Which command could you use to determine which distribution of Linux you are using?
 - a. uname -r
 - b. cat /etc/os-release
 - c. cat /etc/distro
 - d. lsb_release
 - e. uname

8. Which command can be used to view only kernel log messages?
 - a. dmesg
 - b. kmesg
 - c. logger
 - d. logmsg
 - e. journald

9. Which command should you use to install and remove packages in CentOS 7?
- a. yum
 - b. apt-get
 - c. tar
 - d. aptitude
 - e. wget
10. Which of the following files would be the network configuration file for the `wlp0s20u14` network interface?
- a. ifdown-wlp0s20u14
 - b. wlp0s20u14.lease
 - c. ifup-wlp0s20u14
 - d. /etc/wlp0s20u14
 - e. ifcfg-wlp0s20u14
11. Which of these files, if created, prevents login by non-root users?
- a. /sbin/nologin
 - b. /etc/issue
 - c. /etc/motd
 - d. /etc/passwd
 - e. /etc/nologin
12. Which command can you use to add a group manually?
- a. groupadd
 - b. /etc/group
 - c. usermod
 - d. addgr
 - e. gpasswd
13. Which of these utilities will display the message "This account is currently not available."
- a. userdel
 - b. nologin
 - c. issue
 - d. motd
 - e. passwd

14. Which command is used to change file permissions?
- a. chgrp
 - b. chown
 - c. chage
 - d. **chmod**
 - e. chset
15. What command can you use to become the root user?
- a. chown root
 - b. **su -**
 - c. machinectl enable
 - d. su admin
 - e. elevate
16. Which of these utilities can help you discover all the network hops between the system you are on and a destination host on the Internet?
- a. ip
 - b. ifconfig
 - c. route
 - d. ping
 - e. **tracert**
17. Which directory would a configuration file named 'ifcfg-eno777365' be stored in?
- a. /etc
 - b. **/etc/sysconfig/network-scripts**
 - c. /sys
 - d. /run
 - e. /etc/NetworkManager
18. A new home directory is populated with the contents of _____ .
- a. **/etc/skel**
 - b. /etc/home
 - c. /home
 - d. ~
 - e. /skel

19. Which command is used to view `systemd` logs?
- a. `logctl`
 - b. `systemctl show-log`
 - c. `cat /var/log/messages`
 - d. `journalctl`
 - e. `dmesg`
20. What is the absolute path of the file to be used to change GRUB2 configuration?
- a. `/etc/grub2.cfg`
 - b. `/etc/mtab`
 - c. `/etc/os-release`
 - d. `/etc/fstab`
 - e. `/etc/default/grub`
21. Using `yum`, what command would you use to search name, description, and summaries for a given word?
- a. `yum list vim`
 - b. `yum search vim`
 - c. `yum lookup vim`
 - d. none of the above
 - e. all of the above
22. Which of the following commands will assign a static IP address to an interface called "eno1677736":
- a. `addr 192.168.0.5/24 dev eno1677736`
 - b. `ip addr add 192.168.0.5/24 dev eno1677736`
 - c. `ip add 192.168.0.5/24 dev eno1677736`
 - d. `ip a set 192.168.0.5/24 dev eno1677736`
 - e. None of the above

23. Using the "rpm" utility, what command would you use to display all installed packages?

- a. `rpm -qa`
- b. `rpm -qi`
- c. `rpm -ql`
- d. `rpm --list`
- e. None of the above

24. What would running the command "ip addr" do?

- a. Shows addresses assigned to all active network interfaces.
- b. Show the current machine ip address.
- c. The command will fail because it is missing parameters.
- d. Assign a static IP on a network interface
- e. None of the above.

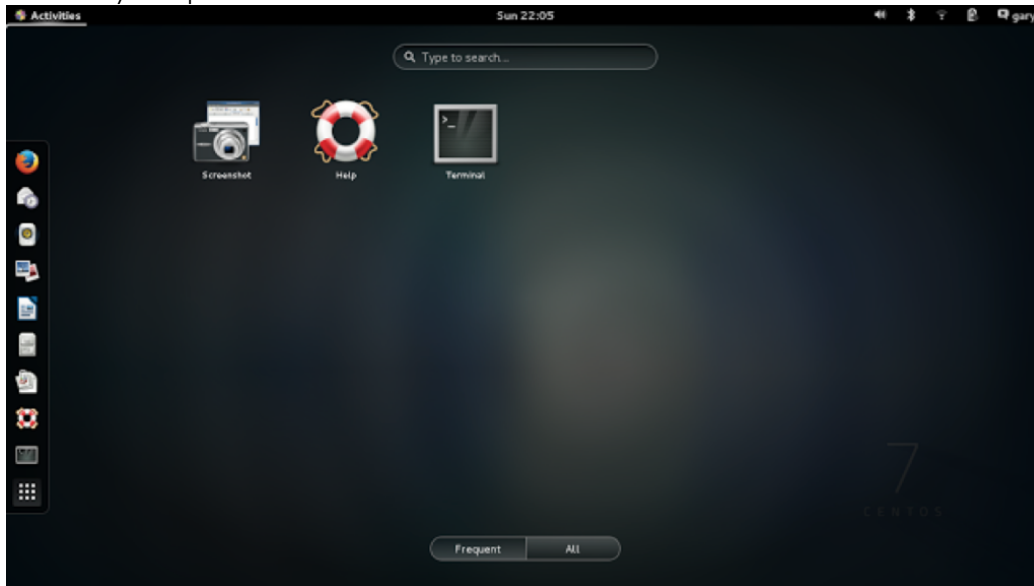
25. Running the command "rpm -e samba" will:

- a. Expand the package called samba
- b. Remove the package called samba
- c. Examine the package file samba
- d. Remove the package called samba as well as its dependencies
- e. None of the above

26. Which command lists only service units on your machine?

- a. `systemctl list-unit-files --type service`
- b. `systemctl service`
- c. `systemctl list-service-units`
- d. `systemctl list-units service`
- e. `systemctl list-units --type service`

27. How do you open this window?



- a. Alt-F2
 - b. Ctrl-space
 - c. Super (AKA, Windows) key
 - d. ALT-F2
 - e. None of the above
28. Issuing the following command will ensure that the "cupsd" service starts when the machine boots up.
- a. `systemctl start cupsd.service`
 - b. `systemctl enable cupsd.service`
 - c. `on-startup yes cupsd.service`
 - d. `chkconfig cupsd.service`
 - e. None of the above, you must edit a configuration file
29. In Linux, PAM stands for:
- a. Pretty-good Authorization Module
 - b. Pluggable Authorization Modules
 - c. Pluggable Authentication Modules
 - d. Protected Access Manager
 - e. Partitioning Around Medoids

30. What is the Linux Kernel?
- a. The heart of the operating system
 - b. Code responsible for allocating hardware resources
 - c. Code responsible for low-level scheduling
 - d. All of the above
 - e. None of the above
31. To open the “run a command” window, you need to press ALT-____ while in graphical mode.
- a. Enter
 - b. F2
 - c. Ctrl
 - d. F4
 - e. O
32. What is the result of running the command **yum group install “Administration Tools”**?
- a. Installation of the “Administration Tools” package
 - b. Installation of all packages on the repository “Administration Tools”
 - c. The package “Administration Tools” gets flagged for installation upon next upgrade
 - d. Nothing
 - e. Installation of several packages relating to Administration Tools
33. What is the name of the CentOS installer?
- a. Python
 - b. RHELInstall
 - c. Anaconda
 - d. CentOSgo
 - e. yum

34. What happens when you put the Linux Firewall into Panic Mode?
- a. All incoming and outgoing network packets are dropped
 - b. All incoming network packets are dropped
 - c. The persistent state of NetworkManager is disabled
 - d. Both b and c
 - e. Both a and c
35. What is a daemon?
- a. A program that runs in the background
 - b. A service
 - c. A server
 - d. All of the above
 - e. Both a and c
36. Which command would you give to update all installed packages using yum?
- a. yum upgrade
 - b. yum install all
 - c. yum update
 - d. yum autoupdate=yes
 - e. yum go
37. Which command is used to view **systemd** logs?
- a. logctl
 - b. dmesg
 - c. syslog show
 - d. journalctl
 - e. systemctl show-log
38. What command can you use to disable the GUI in CentOS 7?
- a. stopx
 - b. systemctl isolate graphical.target
 - c. systemctl isolate multi-user.target
 - d. systemctl stop graphical.target
 - e. systemctl start multi-user.target

39. Which of the following commands will analyze system boot-up performance?

- a. **systemd-analyze**
- b. systemctl
- c. vmstat
- d. uptime
- e. top

40. Which of the following is an example of an X Windows Client?

- a. Firefox
- b. GNOME
- c. Graphical Settings window
- d. **All of the above**
- e. None of the above

41. What command can you use to generate the configuration file for GRUB2?

- a. mkconfig
- b. grub-install
- c. boot-config
- d. grub2-install
- e. **grub2-mkconfig**

True/False (10 marks)

Please answer the following on the Scantron sheet provided. For True, fill out the A bubble, for False the B bubble. You will receive one mark for each question answered correctly.

42. In X window system client-server architecture, the server is the part that handles mouse, keyboard, and display
 - a. True
 - b. False

43. A Static IP, is an address that is allocated (leased) to a client and that has a defined expiration time
 - a. True
 - b. False

44. Running "ip r del default" command will rename del route to default
 - a. True
 - b. False

45. In a Network Interface Configuration File called "ifcfg-eno16777736", setting "BOOTPROTO" field to dhcp means the interface will have a Static address
 - a. True
 - b. False

46. "Process Accounting" is concerned with keeping track of commands executed and resources used.
 - a. True
 - b. False

47. In PAM application configuration files, if a "required" control_flag module fails, the stack status will be marked fail, but modules continue to be processed in order.
 - a. True
 - b. False

48. Command "chroot" allows you to isolate a user into a 'fake' root filesystem
- a. True
 - b. False
49. GNOME is considered an example of a Desktop Environment
- a. True
 - b. False
50. Running the "ip r del default" command will rename del route to default.
- a. True
 - b. False
51. The Master Boot Record (MBR) contains the partition table and bootstrap code.
- a. True
 - b. False