***Linux Essentials for Cybersecurity* (Rothwell/Kinsey)**

**Chapter 1 Distributions and Key Components**

1) Linux is a software component called the \_\_\_\_\_\_\_\_\_\_, which is the software that controls the operating system.

A) shell

B) kernel

C) module

D) library

Answer: B

2) Which of the following is a component of the Linux operating system?

A) User utilities

B) File systems

C) Server software

D) All of the above

Answer: D

3) Which of the following is rarely installed on Linux server systems because it requires additional hard drive space, CPU cycles, and RAM usage, and also could pose a security risk?

A) GUI software

B) Kernel modules

C) Shells

D) Libraries

Answer: A

4) Which of the following Linux components refers to a well-defined structure that stores file and directories?

A) Server software

B) File system

C) Kernel module

D) Shell

Answer: B

5) Which term refers to a software package that often costs nothing?

A) Closed source

B) Flexible

C) Open source

D) Commercial

Answer: C

6) Which of the following refers to a specific implementation of a Linux operating system?

A) Distribution

B) Shell

C) Module

D) Kernel

Answer: A

7) Which type of Linux distribution, which includes Red Hat Enterprise Linux, is designed to be used in a business setting?

A) Live distro

B) Home or amateur

C) Security enhanced

D) Commercial

Answer: D

8) Which type of Linux distribution, which includes Fedora, is focused on individuals who want a choice other than macOS or Microsoft Windows?

A) Commercial

B) Security enhanced

C) Home or amateur

D) Live distro

Answer: C

9) A Linux distribution is also called a Linux \_\_\_\_\_\_\_\_\_\_.

A) CLI

B) shell

C) distro

D) module

Answer: C

10) Which of the following refers to a software program that allows a user to issue commands to the system?

A) Kernel

B) Shell

C) Distro

D) Library

Answer: B

11) Which of the following is the name of the most popular shell that is available for Linux?

A) BASH

B) XFCE

C) KDE

D) None of the above

Answer: A

12) A system with at least \_\_\_\_\_\_\_\_\_\_ of RAM should be able to support at least one VM.

A) 2GB

B) 4GB

C) 6GB

D) 8GB

Answer: D

13) At any given time, there are about \_\_\_\_\_\_\_\_\_\_ active Linux distributions.

A) 100

B) 250

C) 350

D) 500

Answer: B

14) Which of the following is *not* a Red Hat-based distro?

A) Fedora

B) RHEL

C) Ubuntu

D) CentOS

Answer: C

15) Which of the following is *not* a Debian-based distro?

A) Kali

B) Ubuntu

C) Debian

D) Linux Mint

Answer: A

16) Which of the following is a security-based Linux distribution that enables you to determine what security holes are present in your environment?

A) Ubuntu

B) Fedora

C) Kali

D) RHEL

Answer: C

17) A native Linux installation is also known as a \_\_\_\_\_\_\_\_\_\_ installation.

A) hypervisor

B) bare-metal

C) hosted

D) cloud-based

Answer: B

18) Which of the following is *not* an example of a hypervisor software program?

A) VMware

B) Citrix XenServer

C) Oracle VirtualBox

D) CentOS

Answer: D

19) Which of the following is *not* true when installing a distro using Oracle VirtualBox?

A) Typically the default options work well for your initial installations.

B) The first step to installing the distro is to add a new “machine.”

C) To start the installation process, click the new machine and then click the Launch button.

D) On a test system, pick a password that is easy to remember, as password security isn’t as big of a concern in this particular case.

Answer: C

20) Which of the following is *not* true regarding the use of GUI software for a Linux installation?

A) Many distributions include a GUI, and you cannot choose to install a different one.

B) GUI software allows you to use a mouse and keyboard to interact with the system.

C) For personal use, on laptop and desktop systems, having a GUI is normally a good choice.

D) The ease of using a GUI environment often outweighs the disadvantages that this software creates.

Answer: A