IT Fundamentals+ Review Questions

1. What are common items that can be cleared from a web browser when you choose to clear browsing data? (Choose all that apply)

    a. Browsing History
    b. Media Licenses
    c. Download History
    d. Printer Settings
    e. Form Data
    f. Website Permissions

2. What is the appropriate setting choice to prevent Active Scripts from executing in a Microsoft Windows Web Browser?

    a. Disallow
    b. Prevent
    c. Disabled
    d. Prompt

3. What is the main purpose of using a Web Browser Add-On?

    a. To enhance the performance of the computer
    b. To change the security level of the Web Browser
    c. To improve the usability of the Web Browser
    d. To remove functionality from the computer

4. What is the reason to use a Private Browsing session when using a Web Browser?

    a. To ensure that your browser session is stored securely in the computer
    b. To prevent others from shoulder surfing to see what website you are visiting
    c. To allow you to share websites securely only with people you trust
    d. To remove stored cookies and browsing history when you exit the Web Browser

5. What is the icon that is used in a Web Browser to show that a certificate is being used to secure the website?

    a. A key
    b. A padlock
    c. A shield
    d. A star

6. Nate, an Administrator at ITPro.TV is looking for a solution to run fast virtual machines in his production environment. Nate should deploy what?

    a. A generation 2 Hypervisor
    b. A type 1 Hypervisor
    c. A type 2 Hypervisor
    d. A Storage Area Network

7. Colette a Member Services Representative for ITPro.TV has a couple of applications running on her computer. One of the applications hangs. What should she do next?

    a. Restart the computer
    b. Kill the process
    c. Update her computer
    d. Log off then log back on

8. Which of the following is NOT a main function of an operating system?

    a. Input
    b. Processing
    c. Graphic Design
    d. Output

9. Which of the following is an example of multifactor authentication?

    a. Username and password
    b. Retinal scan
    c. Smartcard and usb key fob
    d. Smartcard and pin

10. If an attacker intercepts data in transit this would be an example of which type of attack?

    a. Denial of Service
    b. Man in the Middle
    c. Ransomware
    d. Phishing

11. What type of cable terminators are used for telephone lines?

    a. RJ45
    b. DVI
    c. RJ11
    d. Thunderbolt

12. Which of the following is not a type of display cable?

    a. VGA
    b. HDMI
    c. DVI
    d. SPDIF

13. You are asked to help identify system memory for a laptop, which of the following is a type of laptop system memory:

    a. SODIMM
    b. HDD
    c. PSU
    d. CPU

14. You notice that the desktop computer is constantly rebooting shortly after pressing the power button. You notice that the fans are constantly running at high speeds. What is MOST likely the issue:
    a. Overheating
    b. Battery failure
    c. Optical drive
    d. Video cable

15. A user calls tech support, explaining that his computer is broken and he cannot see anything on the screen. He tells you that the computer was working when he went to lunch. He also informs you that the power light on the monitor is amber colored. What is MOST likely the issue:
    a. Computer is in power saving state
    b. Monitor is not plug into the ac outlet
    c. Video card was disabled
    d. Network failure
    e. Optical drive failed

16. What is a part of a technician's toolkit used when handling computer processors and memory? Choose the BEST option.
    a. Electrostatic discharge wrist strap
    b. Knife
    c. Cable crimpers
    d. Flashlight
    e. Lint-free cloth

17. You are tasked with determining why a user's computer will not boot. The user informs you that the display is off and she can hear a constant clicking sound coming from the computer. Which answer is MOST likely the cause?

    a. Hard drive has failed
    b. Power failure
    c. Overheating
    d. Display cable is disconnected
    e. The processor is disabled

18. When cleaning a mobile tablet display, which of the following is the BEST choice. (Choose two)

    a. Microfiber
    b. Lint-free cloth
    c. Paper towel
    d. Brush
    e. Towel

19. A customer has just finished explaining an issue with an application on their computer and you repeat the issue back to the user. Which troubleshooting best practice are you using?

    a. Summarizing
    b. Isolating the problem
    c. Arguing
    d. Recreating the problem
    e. Documenting

20. Which of the following are examples of interpreted programming languages? (select all that apply)

    a. JavaScript
    b. Python
    c. C
    d. C++
    e. Rust
    f. PHP

21. What is the main purpose of a variable in a programming language?

    a. To save a value for later use in the program
    b. Allows you to add numbers together
    c. Sends an email from the program
    d. None of the Above

22. You are writing a small application to automate some of your more boring tasks. You notice that you are copying and pasting a small segment of source code. What would be an appropriate course of action for that repeated code? (select all that apply)

    a. Write a for loop to repeat the code
    b. Just keep copying and pasting
    c. Write a function that bundles up the repeated code
    d. Assign the repeated code to a variable and use that variable

23. You notice the following lines of code in a program:

```
food_1 = "banana"
food_2 = "brisket"
food_3 = "carrot"
```

What would be an appropriate action to take to remove the repetitive variable names?

    a. Nothing. Just make more variables
    b. Use a for loop
    c. Use an array
    d. None of the above

24. What do you expect the output of the following to be?

```
def awesome_thing(x, y):
    if x == 1:
        answer = x + y
        print("Answer: " + answer)
    else:
        answer = x * y
        print("Answer: " + answer)

awesome_thing(2, 4)
```

    a. Answer: 6
    b. 8
    c. Answer: 8
    d. 6

25. Consider the following:

```
x = 1
y = 5
x = y * x
y = y + 1
z = x + y
```

What is the value of z?

    a. 10
    b. 3
    c. 6
    d. 11

26. Consider the following:

```
def fn(x):
    return x + 1

z = fn(2) + fn(7)
print("z is " + z)
```

What is printed to the screen?

    a. z is 9
    b. z is 11
    c. z is fn(2) + fn(7)
    d. It will not print anything

27. What is the output of the following?

```python
def is_odd(n):
    return n % 2 != 0

def is_even(n):
    return n % 2 == 0

def first(x, y):
    if x in {1, 2, 3}:
        return x - y
    else:
        return x + y

def second(z):
    if is_odd(z) :
        return 3 * z + 1
    else:
        return z / 2

answer = second(first(1, first(3, 5))
print(answer)
```

    a. 4
    b. 17
    c. -3
    d. 10

28. You have just replaced the hard drive in an Apple branded laptop. Which of the following operating systems would you typically install on the laptop?

    a. Windows
    b. macOS
    c. Linux
    d. Android

29. A user reports that their Apple iMac is running slow. Which of the tools would you use to determine the source of the problem?

    a. Traceroute
    b. Activity Monitor
    c. Task Manager
    d. Device Manager

30. You have recently purchased an external hard drive to provide additional storage for your Apple MacBook. You need to format the drive to prepare it for use on your system. Which of the following file systems would be most appropriate for your MacBook?

    a. NTFS
    b. FAT32
    c. APFS
    d. EXT4

31. You would like to install additional 3rd party software on your Apple iMac computer. Which of the following would be the most suitable source to find software for your iMac?

    a. Apple App Store
    b. 3rd party websites
    c. Microsoft Store
    d. iTunes App Store

32. You have been asked to add a table to a SQL compatible database. Which of the following DDL commands would be the most appropriate one to use?

    a. DROP
    b. MODIFY
    c. CREATE
    d. ADD

33. You are in the process of creating a table to store customer details. You need to add a column to store customer phone numbers in the following format: (123)456-7890. Which SQL data type would be most appropriate for storing your phone numbers?

    a. Int
    b. Num
    c. Char
    d. Boolean
    e. Varchar

34. You have been tasked with designing a database for your company. You will need to create a number of tables and assign some special configuration options like primary-key/foreign-key relationships. Which of the following methods would be the easiest way to achieve your requirements?

    a. Use SQL commands via the command line
    b. Create SQL scripts to automate the table layouts
    c. Store the data in a flat-file instead of a database
    d. Use built-in or 3rd party graphical database design tools

35. Which is the fastest connection?

    a. 10 Megabit
    b. 10 Kilobit
    c. 10 bits
    d. 10 Gigabits.

36. Which is valid IP address?

    a. 127.0.0.1
    b. 192.168.10.281
    c. 255.255.255.0
    d. 172.16.10.254

37. You live in a remote area and need internet access but no business connection?

    a. Cable
    b. DSL
    c. Satellite
    d. Fiber

38. Which wireless protocol would you use if you have to provide a max of 11 Mbps connection?

    a. 802.11a
    b. 802.11b
    c. 802.11g
    d. 802.11n
    e. 802.11ac

39. You have setup a wireless router and it works but appears to provide less coverage than expected, which could be the issue?

    a. Wrong protocol
    b. Wrong access point
    c. Interference
    d. Bad configuration

40. A user cannot connect to an IP camera after a power outage, it was working fine before what would you recommend?

    a. buy a new IP camera
    b. the wireless router
    c. reset the IP settings on camera
    d. Connect directly

41. What file system is used by Microsoft Windows operating systems?

    a. NTFS
    b. HFS
    c. Ext4
    d. DOS

42. What file system feature makes a file size smaller?

    a. Compression
    b. Encryption
    c. Extension
    d. Path

43. What do you call an application that an operating system runs in the background?

    a. Service
    b. Driver
    c. Folder
    d. Minecraft

44. What do file systems use to organize and display files in a hierarchical manner?

    a. Directories
    b. Compression
    c. Extensions
    d. Services

45. What is a user interface that includes graphical elements, such as windows, icons and buttons?

    a. GUI
    b. Command line
    c. PowerShell
    d. Terminal

46. What commands could you use to search for specific files in Linux? (Choose two)

    a. Search
    b. Find
    c. Locate
    d. Discover
    e. Reveal

47. Which Operating System utilizes the open-source licensing model that allows you to acquire and distribute the OS for free as long as it is accompanied by the source code?

    a. Mac OS
    b. Linux
    c. Windows Server
    d. Unix

48. The EXT3 and EXT4 filesystems are commonly associated with which Operating System?

    a. Windows Server
    b. Linux
    c. Mac OS
    d. DOS

49. You are working in a Linux terminal and need to list the files of the current working directory. Which of the commands below would you issue?

    a. cat
    b. df
    c. cd
    d. ls

50. You are attempting to examine the IP address and subnet mask of your PC which is running Linux. Which of the commands below would you issue?

    a. ifconfig
    b. dig
    c. netstat
    d. telnet

51. You are working with a file that includes sensitive data such as user credentials (usernames:passwords), credit card numbers, and Social Security Numbers. What utility would you use to set the permissions on the file?

    a. perms
    b. touch
    c. chown
    d. chmod

52. What Linux command would you issue to clear your terminal screen?

    a. clear
    b. wipe
    c. clscreen
    d. cls

53. Which Linux command would you use to display the contents of a text file?

    a. type
    b. cat
    c. print
    d. show

54. You are in Linux trying to delete a directory called "OldFiles" by issuing the rm command. You are getting the error, "rm: cannot remove 'OldFiles' : Is a directory" What is the solution?

    a. Add "-r" argument to rm command
    b. Add "--force" argument to rm command
    c. Add "-i" argument to rm command
    d. Use sudo to run rm command as root user

55. Based on the output below, what permissions are set for the "secret.txt" file with regards to the "admins group?

```
user@localhost:~> ls -al
total 20
drwxrwxr-x  2 user1 user1 4096 Nov 30 11:10 .
drwxr-xr-x 50 user1 user1 4096 Nov 30 11:09 ..
-rw-rw-r--  1  user1 user1  33 Nov 30 11:11 file1
-rw-rw-r--  1  user1 user1  92 Nov 30 11:11 file2
-rw-r-xrwx  1  root admins  46 Nov 30 11:10 secret.txt
```

    a. Read
    b. Read and Write
    c. Execute
    d. Read and Execute
    e. Write and Execute
    f. Write

56. What do you call the information gathering technique that involves sifting through discarded items in garbage bins looking for sensitive data?

    a. Rummaging
    b. Garbage Grabbing
    c. Dumpster Diving
    d. Rubbish Roundup
    e. Shoulder Surfing

57. You receive a phone call from someone asserting to be from the IT help desk. The person happily states their full name and explains that they are a new employee with the IT staff and have been charged with investigating some irregular network activity from your computer. They ask you to verify your identity by providing your login information and manager's name. What type of attack is this?

    a. Password Cracking
    b. Identity Theft
    c. Ransomware
    d. Social Engineering

58. You receive an email from your bank stating that unfortunately there has been a compromise of their computer systems and your account may have been affected. The email provides a you with detailed steps to verify your account's integrity and provides a link that takes you to what appears to be their login page. What type of attack is this?

    a. Phishing
    b. Rootkit
    c. Keylogger
    d. Identity Theft

59. What type of malware takes advantage of the basic programming functionality found in software like Microsoft Word and Excel?

    a. Polymorphic Virus
    b. Ransomware
    c. Trojan Horse
    d. Macro Virus
    e. Worm

60. What type of malware mutates its characteristics and encrypts portions of its code as a means to avoid detection by Antivirus/Antimalware applications?

    a. Trojan Horse
    b. Polymorphic Virus
    c. Macro Virus
    d. Stealth Virus
    e. Retrovirus

61. A malicious program that is self-contained, self-replicating, and self-propagating is known as?

    a. Polymorphic Virus
    b. Worm
    c. Rootkit
    d. Macro Virus

62. What type of password cracking technique attempts to try every possible combination of a given character set until the correct password is found?

    a. Brute-Force
    b. Dictionary
    c. Rainbow Tables
    d. Password Spraying

63. What type of password cracking technique uses a list of words in a file until a password match is found?

   a. Rainbow Tables
   b. Brute-Force
   c. Dictionary
   d. Password Spraying

64. You are working at your computer when you realize that your computer is running slowly. You attempt to browse the Internet and notice that your home page has been changed as well. What is your computer displaying symptoms of?

   a. It's tired
   b. Overheating
   c. Virus/Malware infection
   d. Corrupt update applied

65. You discover that your email account has been compromised by a password brute-force attack. What technology would be affective at preventing a repeat breach?

   a. Kensington Locks
   b. Full Disk Encryption
   c. Antivirus/Antimalware
   d. 2FA/MFA

66. What factors go into making a sufficiently complex and hardened password? Choose all that apply.

   a. Password length
   b. Use upper and lower case letters
   c. Use common words
   d. Use special characters like !@#$
   e. Stick with default passwords

67. You would like access information from the World Wide Web. What type of application would be best?

    a. Web browser
    b. Word processing
    c. Database
    d. Accounting

68. What is an email client?

    a. Application to composes letters and correspondence to print
    b. Application for servers to manage incoming and outgoing emails for users
    c. Application to read, compose, and send electronic mail
    d. Application to store data in related tables

69. You need to create a resume and cover letter for a new job. What type of software would be best?

    a. Project management software
    b. Visual diagramming software
    c. Accounting software
    d. Word processing software

70. Spreadsheet applications store data in:

    a. Related tables and queries
    b. Tabular format consisting of rows and columns
    c. Paragraphs
    d. Slides

71. Database applications store data in:

    a. Related tables and queries
    b. Tabular format consisting of rows and columns
    c. Paragraphs
    d. Slides

72. You have been asked to show the sales performance of the 4th quarter at a company meeting. They would like to see charts and graphs, as well as the new commercial for the holiday sale. What type of application would be best?

    a. Word processing
    b. Project management
    c. Presentation
    d. Spreadsheet

73. You would like to manage budgeting, scheduling, and resource allocation for building the new server room to your office complex. You would also like to track and report on the progress. What type of application would be best?

    a. Presentation
    b. Project management
    c. Word processing
    d. Spreadsheet

74. You are a small business manager and need to manage payroll, invoice orders, pay bills, and track all financial activity for the company. What type of application would be best?

    a. Accounting software
    b. Project management software
    c. Spreadsheet software
    d. Database software

75. Your boss asked you to create diagrams and flowcharts for your sales process. She also wants you to show different floor plans for rearranging the desks on the sales floor. What type of application would be best?

    a. Project management software
    b. Accounting software
    c. Presentation software
    d. Visual diagramming software

76. Your company is expanding their offices overseas. You need to be able to conduct meetings online with audio, video, and chat functionality. What type of software would be best?

    a. Conferencing software
    b. Web browser
    c. Presentation software
    d. Accounting software

77. _____ allows text-based communication between users as both a stand-alone application or embedded in other software.

    a. Conferencing software
    b. Visual diagramming software
    c. Presentation software
    d. Instant messaging software

78. Your team needs to collaborate on the of the year report. However, you are in different regional offices. What's the best approach?

    a. Document sharing
    b. Mail printed version of the report
    c. Schedule meetings to meet in person
    d. Rock, paper, scissors to determine who does the whole report