1) which one of the following directories contains the configuration files?

a. /bin/.

b. /root/.

c. /dev/.

d. /etc/.

* **The correct answer is d. /etc/**. The /etc/ directory is commonly used for storing system configuration files on Unix-like operating systems.

2) The statement "x = 3 + 4*4" is executed. in this case what value will be assigned to the numeric variable x?

a. 92.

b. 20.

c. 19.

d. 234.

To solve this expression, we follow the order of operations (PEMDAS/BODMAS). First, we perform the multiplication: 4*4 = 16. Then, we perform the addition: 3 + 16 = 19.

Therefore, the value assigned to x is 19.

3. The result of the following Java code will be.

a. Runtime error.

b. 0.

c. 05.

d. Compilation Error.

4. Identify the necessary tool for creating and testing your android apps on different virtual devices.

a. IntelliJ IDEA

b. Android SDK tools and platform tools

c. A system image for the Android emulator

d. Android SDK

5. What command is used to show and create files?

a. cat.

b. vi.

c. ed.

d. lyrix.

6. _____is a database schema that depicts key dependencies between the primary key and foreign key.

a. Database Diagram

b. Relation Schema

c. Schema Diagram

d**. ER Diagram**

7. what is the importance of ssh command?

a. to restrict actions available to users.

b. performed in a synchrous way.

c. to connect remote hosts via an authenticated and encrypted channel.

d. performed in real-time

e. to resricted set of commands

8. ____is implemented by combining methods and attribute into a class.

a. Abstraction.

b. Polymorphism.

c. Inheritance.

d. **Encapsulation.**

9. .....is a valid name for a variable?

a. T4 Tutorials.

b. **T4_Tutorials**

c. 4 Tutorials

d. T4.Tutorials.

10. .....describe when an ativity will start interacting with the user.

a. onResume

b. onDestroy

c. onStop

d. **onCreate**

11. You have just replaced a processor in a computer and now need to add a cooling to attach the coling system to the processor?

a. Thermal paste

b. **Heat sink**

c. Superglue

d. Fan

12. which one of the following access methods used in a dedicated management channel?

a. Telnet

b. **In-band**

c. SSH

d. MAC

13. What is the proper syntax when using a message dialog box?

a. MessageBox.Show "Hi There","Hi"

b. MessageBox.Show Hi There,Hi

c**. MessagBox.Show("Hi","Hi")**

d. MessageBox.Show(Hi there,Hi)

14. During installing a new video card into a desktop computer, What type of expansion slot is preferred today for high performance graphics adapters?

a. AGP

b. SATA

c. PCI

d. **PCIe**

15. Assume: Biruk wants to send a secure message M to Alem, and they want to assure its integrity and confidentiality.

How do they mak it possible if they use public crypto?(Consider public and private key pair K+B, and K-B respectively for Biruk, K+A, and K-A respectively for Alem).

a. **K+B(K-A-|(M))**

b. K+B(K-A-|(M))

c. K-B(K-A-|(M))

d. K-A-|(K-A(M))

16. Which of the following approaches is best for state decision support systemsoftware project management activities?

a. Hybrid approach

b**. Activity-based approach**

c. Product-based approach

d. Project execution

17. Assume: a computer lab where student demands the administrator access to a Windows 11 system to install SQL

Server; but that right should not be given to the student unless he/she is member of an employee. which principle of cyber security is considered here?

a. Separation of privileges

b. Fail-safe

c. Open design

d. **Least privileges**

18. Which one of the following creates a connection-oriented connection that provides reliable end-to-end transfer and uses window mechanism for control?

a. Transport layer

b. Internet protocol

c. Session layer

d**. Transmission Control protocol**

19. In order to establish a neighborship, which is a need for EIGRP routers?

a. Matching areas

b. Matching delay metrics

c. Matching banwidth metrics

d. **Matching K metrics**

20. .....is HTTP status code for client error such as page not found.

a. 5xx

b. 1xx

c. 3xx

d. 4xx

21. Which of the following is a physical memory format insalled directly in today's desktop computer system?

a. SSD

b. eMMC

c. DIMM

d. HDD

22. In public key encryption, if A wants to send an encrypted message to B, which statement is true?

a. A encrypts message using B's private key

b. A encrypts message using B's public key

c. A encrypts message using his private key

d. A encrypts message using pulic key

23. .....is the default file system type of Linux.

a. ext2

b. ext3

c. ext

d. mimix

24. Select the task involves when you write object-oriented programs.

a. Creating class, which are specific instances of objects

b. Creating applications that manipulate or use objects

c. Creating objects, which are blueprint for classes

d. Creating a GUI environment for users is a natural use for object orientation

25. What will be the output of the following statement? txtBox.Text = FormatCurrency(1234.567)

a. $1,234.57

b. 1,234.57

c. $1234.567

d. $1234.57

26. One of the following cannot measure the quality of an abstraction?

a. sufficiency

b. coupling

c. primitiveness

d. ease of use

27. Which OSI reference model layer is responsible for translating data in a form that can be understood by the receiver?

a. Application layer

b. Presentation layer

c. Session layer

d. Transport layer

28. One of the following is not the disadvantage of simple file processing?

a. Data redundancy and inconsistency

b. Data Separation and isolation

c. Concurrent access anomalies

d. Program-Data independence

29. Based on the following source code, which page will be displayed?

a. Login page

b. Password change page

c. Logout page

d. Index page

* without source code it is not possible to detrmine which page will be displayed.

30. A system is in a.....state if there exists a set of transactions such that every transaction in the set is waiting for another transaction in the set.

a. Ready

b. Waiting

c. Idle

d. Deadlock

31. About the parts of a router, which of the following statements is true?

a. A backup version of the ISO utilized during the boot process is kept in NVRAM

b. ROM contains diagnostics that are run on the hardware modules

c. A 0configuration file used during the boot process is permanently stored in RAM

d. The most recent and updated configuration files are located in the ROM.

32. .....is the tag for the heading that is the largest and the most bold.

a. H3

b. H4

c. H2

d. H1

33. Which of the following is true regarding the command switchport mode dynamic auto?

a. The interface will remain an access link if the native VLAN is changed

b. The interface will become a trunk if requested on the neighboring port.

c. The interface will become a trunk if the neighboring port is configured the same.

d. The interface will remain an access link if the neighboring port is configured as a trunk

34. Routing loops are not a problem for link-state protocols like distance-vector protocols.why?

a. Link-state protocols require routers to maintain their own topology database of the network

b. Link-state protocols share the topology database between all routers

c. Link-state protocols use multiple routes to the same destination

d. Link-state protocols allow routers to maintain a link-state database of all routers

35. .....is a program that executes compiled Java code on a specific platfrom.

a. Java programming manual

b. Eclipse Editor

c. Java Compiler

d. Java Virtual Machine

36. Which factor that measures the quality of the management process?

a. Budget management

b. project team

c. project plan

d. Results

37. in case of any shutdown during transaction before commit, which of the following statement is done automatically?

a. Rollback

b. Commit

C. Flashback

d. View

38. in object -oriented development through which diagrams we are not analyze the dynamic semantics of problem or its implementation?

a. script diagram

b. interaction diagram

c. **process diagrams**

d. state transaction diagrams

39. if a method contains a local variable with the same as one of its class's the local variable _____ the field in the method's scope

a. import

b. shadows

c. class

d collector

40. on a routher, you have numerous routes set up . what command only displays static routes?

a. Router#show ip routes static

b. Router#show ip routes

c. Router#show ip static routes

d. Router#show static routes

41. what is the correct HTML code for referring an external javascript?

a. <script> mystyle.css</script>

b. <script href="myscript.js""type="text/javascript"><?script>

c. <style scr="myscript.js"></style>

d. <script scr="myscript.js"" type="text/javascript"></script>

42. the correct order of query optimization is____

a. Querying, Scanning, Validating, parsing

b. Querying, parsing, validating, scanning

c**. Querying, scanning, parsing, validating**

d. Querying, validating, Scanning, Parsing

43. suppose that the selector in a select Case block is the string variable myVar. Which of the following Case clause is invalid?

a. Case "Admas"

b. Case "739"

c. Case (myCar.Subsctring(0,1)

d. Case myVar.Length

44. what programming language is used to create system calls in UNIX?

a. C++

b. Assembly language

c. Fortran

D. C

45. which of the following operations is utilized on java to allocate memory to an arry variable?

New malloc

b. new

c. malloc

d. alloc

46. when you design a class diagram, which class hierarchies' relationship you arenot going to apply

a. Aggregation

b. Application

c. Instantiation

d. Association

47. which information does the TCP header contain but the UDP header does not?

a. checksum

Source port

c. Window

d. Application layer data

48. among the four frames of organization _____ addresses the question flow roles and responsibilities coordination. And control are run?

a. Human resources

b. political

c. symbolic

d. Structure

49. what needs to be configured according to the topology below to allow traffic to be routed to the host if it enters routers A with the destination address 198.44.4.217

a. RouterA(config)#ip route 198.44.4.0.255.255.255.0 198.44.4.5

b. RouterA(config)#ip route 198.44.4.0.255.255.255.0 fast 0/1

c. nothing needs to be done

d. RouterA(config)#ip route 198.44.4.0/24 fast 0/1

50. Assume a concept denoted by $X \rightarrow Y$, between two sets of attributes X and Y that are subsets of a relation R specifies a constraint on the possible tuples that can form a relation state r of R. the constraint is that, for any two tuples t1 and t1 in r that have t1[X]=t2[X], they must also have t1[Y]=t1[Y]. which normalization level describes this concept?

a. 1NF

b. 3NF

c. BCNF

d. 2NF

51. identify the function that changes the output of intSalary=inputBox("What is your salary") in to numerical representation

a. Convert ()

b. Val()

c. Int()

d. Parse()

52. what command will stop all plain-text password display in a router configuraton files for unencrypted password?

a. Router(config)# enable password secret

b. Router (config)# service password-encryption

c. Router (config)# service password encryption

d. Router (config)# service- password-encryption

53. A communication between application and the android Operating System is handled by ____

a. broadcast receiver

b. service

c. content provider

d. Activities

54. which one of the following statements correctly describe the feature of object-oriented programming?

a. objects are a characteristic that define an attribute; they are properties of the attribute

b. inheritance allows you to treat all of object's methods and data as a single entity

c. **A method is a self-contained block of program code that carriers out some action similar to a procedure in a procedural program**

d. encapsulation allows a class to be a subclass of a superclass and there by inherit public and protected variables and method of the superclass.

55. Assume: Dawit created some nested tags as displayed here: Peace! . Did he perform valid nesting? Why?

a. No, though the first part is right the second part should be

b. No, because paragraph tags need to be right before the actual text

c. Yes, because the tags are nested correctly

d. No, because italic must always come before bold tags

56. which one of the following assigns the value 3 to the 0th index of the temp array?

a. temp[0]=3;

b. temp[3]=0;

c. 3=temp[0];

d. temp(0)=3

57. if you want to display an image without any text around it, you should nest it inside what tag(s)?

a.

b. <p:img>

**c. <img> **

d. <img : p>

58. Referencing the following HTML listing, how would you style only the first paragraph inside the footer element to have a smaller font size?

a. footer:p:first-child{font-size:x-small;}

b. footer p.first-child{font-size:x-small;}

c. footer=>p,first-child{font-size:x-small;}

d. footer p:first-child{font-size:x-small;}

59. Eavesdropping and packet sniffing are considered to be attacks of.....

a. Confidentiality

b. Authentication

c. Integrity

d. Non-repudiation

60. .....is threats of a database, which can occure due to creation, insertion, updating, changing the status of data, and deletion.

a. loss of accountability

b. loss of confidentiality

c. loss of availability

d. loss of integrity

61. OSPF uses what multicast address for neighbor discovery?

a. 224.0.0.6

b. 224.0.0.7

c. 224.0.0.5

d. 224.0.0.4

62. What command alters the group owner of a file?

a. group

b. chgrp

c. cgrp

d. change

63. Assume the relation staff(eid:integer, ename:string, age:integer, salary:real) write SQL statement that increases employee salary by 5%?

a. UPDATE staff SET alary=salary*1.05

b. CHANGE staff SET salary=salary + 0.05

c. ALTER staff SET salary = 0.05

d. MODIFY staff SET salary = salary*.05

64. Digital signatures are primarily designed to provide additional protection with electronic messages in order to ensure

a. message deletion

b. message modification

c. message read by unauthorized party

d. sender verification

65. Which of the following variable holds information about the web server and page

a. $_SESSION[]

b. $_SERVER[]

c. $_POST[]

d. $_REQUEST[]

66. Which tag used to add a background color for all <h1> elements?

a. h1.all{background-color:#FFFFF}

b. all.h1{background-color:#FFFFF}

c. h1{background-color:#FFFFF}

d. All

67. Application-associated processing in the background is handled by

a. service

b. broadcast receivers

c. activities

d. content provider

68. Which function is operated in layer 2 (function of a switch)?

a. Determining the forwarding interfaces based upon the destination MAC address and tables

b. Learning the MAC address by examining the destination MAC addresses

c. Repeating the electrical signal to all ports

d. Forwarding the data based upon logical addressing

69. Which function is not relevant to protect your site from characters that can potentially do damage to your system.

a. urlencode()

b. addslashes()

c. mysql_real_escape_string()

d. eval()

70. The ...../notation in a relative path of hypertext reference matches

a. Open the parent folder

b. Go down a folder

c. Creat a folder

d. Search a folder

71. .....defined for a simple connectionless communication that provides no error recovery and no delivery guarantee.

a. SMTP

b. IP

c. UDP

d. FTP

72. The super global array variables are accessible

a. Only inside functions

b. Only outside functions

c. Anywhere except in classes

d. Anywhere

73. When a new computer user wants to use virtualization, which hardware components need to support virtual technology for this to work properly?

a. BIOS

b. ROM

c. Motherboard

d. RAM

* To use virtualization, the hardware components that need to support virtual technology are:

a. BIOS - The computer's BIOS (Basic Input/Output System) needs to have virtualization support enabled. This setting can usually be found in the BIOS settings menu.

c. Motherboard - The motherboard needs to have support for virtualization technology. Most modern motherboards have this feature, but you should check the specifications or consult the manufacturer's documentation to confirm.

d. RAM - The computer's RAM (Random Access Memory) needs to meet the requirements for virtualization. While there is no specific type of RAM required, having enough RAM is important for running virtual machines smoothly. The amount of RAM required depends on the number of virtual machines and their resource requirements.

b. ROM (Read-Only Memory) is not directly related to virtualization and does not need to have virtual technology support for virtualization to work properly.

74. . .....is an insertion operator which is used for overloading.

a. Overloading +=

b. Overloading <<

c. Overloading &&

d. Overloading ||