

1. _____ is performed with the target's permission in a professional setting.

ans : optiona

- a) Ethical hacking
- b) Social engineering
- c) System Engineering
- d) Software Testing

2. Log scales are linear in _____.

ans : optionc

- a) Addition
- b) Subtraction
- c) Multiplication
- d) Division

3. Which one of the following is not commonly used aesthetics in data visualization?

ans : optiona

- a) Image
- b) Color
- c) Position
- d) Shape

4. _____ can be useful for data of a periodic nature, such that data values at one end of the scale can be logically joined to data values at the other end.

ans : optionb

- a) Cartesian coordinates
- b) Polar coordinates
- c) Non-linear axes
- d) Linear scale

5. Which of the following statements describes a discrete variable?

ans : optionb

- a) It can take on any value within a range of values

- b) It can only take on whole number values
- c) It is continuous and can take on any value
- d) It is a categorical variable that represents groups or categories

6. _____ is a branch of science that deals with programming the systems in such a way that they automatically learn and improve with experience.

ans : optiona

- a) Machine Learning
- b) Deep learning
- c) Neural Network
- d) IoT

7. _____ is a subfield of machine learning.

ans : optiona

- a) Deep Learning
- b) Artificial Intelligence
- c) Shallow Learning
- d) Artifical Neural Network

8. _____ algorithms are inspired by the structure and function of the brain called artificial neural networks.

ans : optiond

- a) Machine Leaning
- b) Artificial Intelligence
- c) Shallow Learning
- d) Deep Learning

9. _____ makes sense of unlabeled data without having any predefined dataset for its training.

ans : optionb

- a) Supervised Learning
- b) Unsupervised Learning
- c) Reinforcement learning
- d) Semi-Supervised Learning

10. Which type of AI is commonly used for speech recognition and image recognition?

ans : optiona

- a) Narrow AI
- b) General AI
- c) Super AI
- d) Strong AI

11. _____ is one of the best examples of Limited Memory systems.

ans : optiona

- a) Self-driving car
- b) IBM's Deep Blue system
- c) Google's AlphaGo
- d) Apple Siri

12. The X dimension of AI philosophy is _____.

ans : optionb

- a) Reasoning
- b) Cognition
- c) Interface
- d) Knowledge

13. The core components and constituents of AI are derived from the concept of _____.

ans : optiond

- a) Logic
- b) Cognition
- c) Computation
- d) All of the above

14. What test did ELIZA successfully pass?

ans : optionc

- a) Medical Diagnosis Test
- b) Customer Service Test
- c) Turing Test
- d) Financial Advisor Test

15. _____ is a rule of thumb, strategy, trick, simplification, or any other kind of device which drastically limits search for solutions in large problem spaces.

ans : optiona

- a) Heuristic
- b) Critical
- c) Value based
- d) Analytical

16. Quantitative data deals with _____ .

ans : optiona

- a) Numbers
- b) Characteristics
- c) Images
- d) Sketches

17. ----- is a polar coordinate system?

ans : optionb

- a) A system for measuring temperature
- b) A system to specify positions via an angle and a radial distance from the origin
- c) A system for measuring weight
- d) A system for measuring time

18. 802.3 is the standard for 10BASE5 Ethernet that uses _____ as a shared medium

ans : optionb

- a) Twisted pair cable
- b) Coaxial cable

c) Fiber optic cable

d) Copper wire

19. _____ is an actuator that creates motion in a straight line.

ans : optionc

a) Relay

b) Solenoid

c) Linear Actuator

d) DC Motor

20. IEEE 802.11 is a collection of _____ communication standards

ans : optiona

a) Wireless local area network

b) Mobile

c) Ethernet

d) Wireless broadband

21. _____ uses 128-bit address scheme that allows total of 2^{128} or 3.4×10^{38} addresses.

ans : optionb

a) IPv4

b) IPv6

c) 6LOWPAN

d) None of these

22. _____ standards form the basis of specifications for high level communication protocols such as ZigBee.

ans : optiond

a) 802.3

b) 802.11

c) 802.16

d) 802.15.4

23. The actuators used as an electromagnet is -----

ans : optiona

- a) Solenoid
- b) Relay
- c) DC Motors
- d) Stepper Motor

24. _____ wireless technology is used to deliver higher multi-Gbps peak data speeds.

ans : optiond

- a) 2G
- b) 3G
- c) 4G
- d) 5G

25. In telecommunication networks, NGN stands for _____.

ans : optiona

- a) Next Generation Network
- b) Network Growth Nucleus
- c) Network Generation Nexus
- d) New Global Network

26. Number of layers in NGN architecture is _____.

ans : optiond

- a) 7
- b) 6
- c) 5
- d) 4

27. Layers of NGN are _____.

ans : optiona

- a) Access, Transport, Control, Service Layer
- b) Physical, Data Link, Network, Session Layer
- c) Application, Session, Transport, Network
- d) Network, Application Layer

28. Wi Max, Wi-Fi, LTE Technology is used in ____mobile network.

ans : optionc

a) 2G

b) 3G

c) 4G

d) 5G

29. What is the primary function of a Label Switch Router?

ans : optionb

a) To forward packets based on their IP addresses

b) To forward packets based on their labels

c) To perform security functions on network traffic

d) To provide Quality of Service (QoS) for network traffic

30. Which of the following is an example of a 5G application for the agriculture industry?

ans : optionc

a) Virtual reality gaming

b) Online shopping

c) Remote monitoring of crops and livestock

d) Social media

31. Which of the following industries can benefit from NGN applications?

ans : optiond

a) Transportation

b) Agriculture

c) Manufacturing

d) All of the above

32. In Digital Forensic,Planning,Transport of Evidence and Presentation of hypothesis are phases of ____model.?

ans : optionb

a) ADFM

- b) EMCI
- c) IDIP
- d) None of these

33. The digital evidence are used to establish a credible link between_____

ans : optionc

- a) Attacker and Information
- b) Victim and the crime scene
- c) Attacker,victim and the crime scene
- d) Attacker and the crime scene

34. Dried blood,fingerprint,DNA samples are examples of ____?

ans : optionb

- a) Documented Evidence
- b) Substantial Evidence
- c) Testimonial Evidence
- d) Explainable Evidence

35. In ADFM,Which phase is used to provide summary and explanation of conclusion?

ans : optionb

- a) Approach Strategy
- b) Presentation
- c) Preservation
- d) Analysis

36. Ethical norms for investigator is -----

ans : optiond

- a) Should avoid harm to others
- b) Should be honest and trustworthy
- c) should contribute to the society
- d) All of above

37. -----is Unethical norms for Digital Forensic Investigation ?

ans : optiona

- a) Display bias or prejudice in findings or observation
- b) Honor confidentiality
- c) Respect privacy of others
- d) Being honest and trustworthy

38. What do the Cyberterrorists do?

ans : optionc

- a) They are skilled criminal experts who write some of the hacking tools, including the scripts and other programs that the script kiddies and security professionals use.
- b) They are highly technical and publicly known security experts who not only monitor and track computer, network, and application vulnerabilities but also write the tools and other code to exploit them.
- c) attack corporate or government computers and public utility infrastructures, such as power grids and air-traffic control towers.
- d) They are computer novices who take advantage of the exploit tools, vulnerability scanners, and documentation available free on the Internet but who don't have any real knowledge of what's really

39. The EMCI follows model ?

ans : optiona

- a) Waterfall
- b) Incremental
- c) V-model
- d) Data Flow

40. _____ indicates collection, sequence of control, transfer and analysis. It also documents each person who handled the evidence, the date /time it was collected or transferred and the purpose for the transfer.

ans : optionc

- a) Best Evidence
- b) Locard's exchange principle

c) Chain of Custody

d) None of these

41. In the case study of Illegal money transfer where the accused transferred huge amount of money from different accounts to fake accounts using cyber cafe, which digital evidences can be found out by Investigators ?

ans : option d

a) System server logs

b) IP addresses of machines in cyber cafe

c) E-mail IDs of accused

d) All of above

42. Which phase of IDIP model includes Detection & Notification Phase?

ans : option a

a) Deployment Phase

b) Physical Crime Investigation

c) Readiness

d) Review phase

43. How many layers are there in Blockchain architecture?

ans : option c

a) 3

b) 4

c) 5

d) 7

44. Which layer is called as logical layer of Blockchain architecture?

ans : option b

a) Consensus Layer

- b) Semantic Layer
- c) Data Link layer
- d) Application Layer

45. Which of the following statement is true about Blockchain ?

ans : optiond

- a) Blockchain is peer to peer system with no third parties in between.
- b) Blockchain is shared,decentralized and open ledger of transactions.
- c) Blockchain technology was designed to enable true decentralization.
- d) All of these

46. ----- is a common,unchallengeable,digital ledger that allows the process of recording transactions and tracking assets in a business network.

ans : optiona

- a) Blockchain
- b) Cryptography
- c) Client Server Network
- d) Centralized system

47. In 2008_____developed system which contains secure history of data exchange.

ans : optionc

- a) Merkle
- b) Binary
- c) Satoshi Nakamoto
- d) All of above

48. Exploiting weaknesses in network transport mechanisms, such as TCP/IP is an example of

ans : optionb

- a) Operating system attack
- b) Network infrastructure attacks
- c) Non technical attack
- d) Application attack

49. Respecting privacy is a -----

ans : optionb

- a) data hiding principle
- b) security assessment principle
- c) testing process principle
- d) network security principle

50. In ethical hacking Reading online help files for the given tool. Study the user's manual guide for given commercial tool

ans : optiond

- a) Executing the plan
- b) Formulating the plan
- c) Evaluating results
- d) using the Selected tool

51. Classify the following attack in the suitable category :John floods a network with too many request and creates a denial of service(DoS) for legitimate requests.

ans : optionb

- a) Operating system attack
- b) Network infrastructure attack
- c) Non-technical attack
- d) Application attack

52. Built in authentication system of a College exam portal is broken down and passwords are cracked to gain access- this attack comes under _____

ans : optiona

- a) Operating system attack
- b) Network infrastructure attack
- c) nontechnical attack

d) application attack

53. GDPR is a legal standard that protects the data of _____

ans : optiona

a) European Union citizens

b) Asian citizen

c) American Citizens

d) African citizens

54. Vulnerability scanning in ethical hacking finds -----

ans : optionb

a) Strengths

b) Weaknesses

c) opportunities

d) Threats

55. Global information assurance certification (GIAC), Certified Information Systems Security Professional (CISSP) are examples of -----

ans : optiond

a) System testing certification

b) Network testing Certification

c) Datawarehousing testing certification

d) Securitiy testing certification

56. To catch a thief, think like a thief. That's the basis for _____

ans : optionb

a) Security testing

b) ethical hacking

c) configuration testing

d) performance testing

57. In Blockchain,----- layer is used in the peer-to-peer communications between the nodes that allow them to discover each other .

ans : optionb

- a) Application Layer
- b) Propagation Layer
- c) Consensus Layer
- d) Execution Layer

58. _____ meaning a rogue employee, contractor, intern, or other user who abuses his or her trusted privileges.

ans : optiona

- a) A malicious user
- b) A tester
- c) A Design engineer
- d) An interpreter

59. Buffer overflow attacks are _____

ans : optiona

- a) often how the hacker can get in to modify system files, read database files, and more.
- b) often how the hacker can get in to modify network files and crack password.
- c) often how the hacker can get in to modify the IP address
- d) often how the hacker can get in to network to diable the functionalities.

60. What is traffic analysis or social network analysis?

ans : optionb

- a) Crashing servers and Transmitting malware
- b) Gathering messaging-trend information via log files or a network analyzer that can tip off the attacker about conversations between people and organizations
- c) Capturing information while it travels across the network and Perusing e-mails stored on servers and workstations
- d) Gathering internal network configuration information, such as host-names and IP addresse

61. E-mail bombs attack is -----

ans : optionb

- a) creating an attachment-overload attack by sending hundreds or thousands of e-mails with very large attachments to one or more recipients on your network.
- b) creating denial of service (DoS) conditions against your e-mail software and even your network and Internet connection by taking up a large amount of bandwidth and, sometimes, requiring large amounts of storage space.
- c) when attacker can crash your e-mail service or bring it to a crawl by filling the incoming Internet connection with junk.
- d) denies large attachments from being written to disk.

62. An attacker can create an _____ by sending hundreds or thousands of e-mails with very large attachments to one or more recipients on your network.

ans : optiona

- a) attachment-overload attack
- b) email
- c) spreadsheet
- d) document

63. What is Bandwidth blocking?

ans : optionb

- a) Multiple large messages can quickly fill the total storage capacity of an e-mail server.
- b) An attacker can crash e-mail service or bring it to a crawl by filling the incoming Internet connection with junk.
- c) An attack using a flood of e-mails is often carried out in spam attacks and other denial of service attempts.
- d) An attacker blocks the internet services on the PC and in the network.

64. To prevent attachment-overload attacks what should be done?

ans : optionb

- a) Limit the size of operating system files
- b) Limit the size of either e-mails or e-mail attachments.
- c) Limit the number of users in the network
- d) Limit the number of emails.

65. Using _____ on web-based e-mail forms can help minimize the impact of automated attacks and lessen your chances of e-mail flooding and denial of service

ans : optiona

- a) CAPTCHA
- b) Password
- c) MESSAGE
- d) OTP

66. What is function of SMTP Relay?

ans : optionb

- a) SMTP relay lets users send e-mails through internal servers.
- b) SMTP relay lets users send e-mails through external servers.
- c) SMTP relay lets people send emails in normal fashion.
- d) SMTP relay lets users change the authorities in the networking.

67. The function of Google dork intitle operator is -----

ans : optionc

- a) To allows a hacker to develop the pages with specific text in their HTML title.
- b) To allows a hacker to delete for pages with specific text in their HTML title.
- c) To allows a hacker to search for pages with specific text in their HTML title.
- d) To allows a hacker to change for pages with specific text in their HTML title.

68. Which layer of blockchain assures that all the nodes must get approve on a common state of the shared ledger and also deals with safety and security of the blockchain?

ans : optionc

- a) Application Layer
- b) Semantic Layer
- c) Consensus Layer
- d) Propagation Layer

69. Bitcoin and Ethereum are examples of ____?

ans : optionb

- a) Currency

- b) Cryptocurrency
- c) Cryptography
- d) Algorithm

70. Categorize the following attack :Entire databases being corrupted or deleted when insecure Windows-based systems are attacked causing serious problems to a tremendous number of computers around the world.

ans : optionc

- a) Network infrastructure attack
- b) Technical attack
- c) Operating system attack
- d) Application attack

71. A buffer overflow attack can be -----

ans : optiond

- a) Stack-based or buffer-based
- b) Stack based or RAM based
- c) Heap-based or buffer based
- d) Stack-based or Heap-based

72. What do you understand by Stack based buffer overflow attack ?

ans : optionc

- a) Hacker corrupts data within the heap, and that code change forces your system to overwrite important data.
- b) Attacker corrupts the data of program, and that transmission is stored somewhere.
- c) Attacker sends data to a program, and that transmission is stored in a too-small stack buffer.
- d) Attacker requests for the data, and that transmits that data back to sender .

73. When the hacker corrupts data within the heap, and that code change forces your system to overwrite important data, it is called as -----

ans : optionc

- a) scan based buffer overflow
- b) sweep based buffer overflow
- c) heap based buffer overflow

d) stack based buffer overflow

74. Transmitting malware, Crashing servers, Obtaining remote control of workstations, Capturing and modifying confidential information as it travels across the network can be understood as -----

ans : option a

a) hacker attacks against messaging systems

b) hacker attacks against email systems

c) hacker attacks against operating systems

d) hacker attacks against network systems

75. Perusing e-mails in e-mail databases on servers and workstations can be understood as -----

ans : option b

a) hacker attacks against network systems

b) hacker attacks against messaging systems

c) hacker attacks against email systems

d) hacker attacks against operating systems

76. An email bomb is also known as a -----

ans : option d

a) latta bomb

b) later bomb

c) latter bomb

d) letter bomb.

77. _____ is a form of Internet abuse which is perpetrated through the sending of massive volumes of email to a specific email address with the goal of overflowing the mailbox and overwhelming the mail server hosting the address, making it into some form of denial of service attack.

ans : option c

a) Google dorking

b) Port sweeping

c) An email bomb

d) MAC address spoofing

78. Attachment overloading attack, connection attack, autoresponder attack are understood as -----

ans : optiona

- a) email bomb attack
- b) Heap based buffer overflow attack
- c) stack based buffer overflow attack
- d) message system attack

79. Application of connection attack is done by -----

ans : optiond

- a) crashing e-mail service or bring it to a crawl by filling the incoming Internet connection with junk.
- b) creating an attachment-overloading attack by sending hundreds or thousands of e-mails with very large attachments.
- c) multiple large messages are sent by hacker that can quickly fill the total storage capacity of an e-mail server.
- d) a hacker sending a huge amount of e-mails simultaneously to addresses on the network.

80. Use new operating systems, Watch the language, Lean on developers, Apply your patches are performed as countermeasures for -----

ans : optiona

- a) Operating system attack
- b) Network infrastructure attack
- c) Application attack
- d) Technical attack

81. Windows attack leads to -----

ans : optiond

- a) Transmitting malware, Crashing servers, Obtaining remote control of workstations, Capturing and modifying confidential information as it travels across the network

- b) secured networks-secured passwords-obtaining more patches for OS -No DoS attacks
- c) No Transmitting malware, No Crashing servers, Not Obtaining remote control of workstations, Non Capturing and non-modifying confidential information as it travels across the network
- d) Leakage of confidential information, including files being copied and credit card, numbers being stolen, Passwords being cracked and used to carry out other attacks, Systems taken completely offline by DoS attacks

82. Sequential steps hackers uses are: __, __, __, __

- A) Maintaining Access,
- B) Reconnaissance
- C) Scanning
- D) Gaining Access

ans : optiona

- a) B, C, D, A
- b) B, A, C, D
- c) A, B, C, D
- d) D, C, B, A

83. _____ is the art of exploiting the human elements to gain access to unauthorised resources

ans : optiona

- a) Social Engineering.
- b) IT Engineering.
- c) Software testing
- d) Ethical Hacking.

84. Ethical hacking will allow to____ all the massive security breaches.

ans : optionb

- a) Remove.
- b) Measure.
- c) Reject.
- d) Update

85. ____system has a centralized control with all administrative rights.

ans : optiond

- a) Blockchain
- b) Cryptography
- c) Decentralized
- d) Centralized

86. Identify system shown in given figure?

ans : optionc

- a) Centralized System
- b) Decentralized System
- c) Decentralized and peer to peer system
- d) None of these

87. _____system does not have a centralized control and every node has equal authority.

ans : optionb

- a) Centralized
- b) Decentralized
- c) Client server
- d) Star Network

88. In ----- layer in Blockchain, the node gets Synchronized with another node in network and when a transaction is done, then node gets broadcasted to all other nodes in the network.

ans : optiond

- a) Execution Layer
- b) Application Layer
- c) Semantic Layer
- d) Propagation Layer

89. Which Technology can help contract management and audit the origin of a product ?

ans : optionb

- a) Centralized Technology
- b) Blockchain Technology
- c) Exchange
- d) Product to Product

90. In Blockchain, when a transaction is recorded ,it cannot be modified.This feature is called as_____?

ans : optiona

- a) Immutability
- b) Cryptocurrency
- c) VPN
- d) Bitcoin

91. ADFM stands for ____?

ans : optionb

- a) Analog Digital Forensic Model
- b) Abstract Digital Forensic Model
- c) Abstract Descrete Forensic Model
- d) Analog Descrete Forensic Model

92. In ADFM model,The preparation of tools,techniques,search warrants are functions of which phase?

ans : optiond

- a) Collection
- b) Preservation
- c) Examination
- d) Preparation

93. In IDIP Model,Which phase is used to put the pieces of digital puzzle together and developing investigative hypotheses.?

ans : optionc

- a) Review phase
- b) Presentation phase
- c) Reconstruction phase

d) Notification phase

94. In digital Forensics, while doing Investigation, the investigator should follow ?

ans : option d

- a) Honesty towards the Investigation
- b) Carefully Handling the digital evidences
- c) Compliance with the law and professional Norms
- d) All of above

95. Why it is important to maintain the Chain of Custody ?

ans : option d

- a) To preserve the integrity of the evidence
- b) To prevent it from contamination
- c) To maintain the state of evidence
- d) All of the above

96. What is/are the procedural steps to establish chain of Custody?

ans : option b

- a) Work with original evidence
- b) Perform a hash test analysis
- c) Alter the state of evidence
- d) Declare the confidential matters

97. Identify Forensic Model in given fig?

ans : option d

- a) IDIP
- b) EMCI
- c) Waterfall
- d) ADFM

98. The general ethical norms for Investigator is -----

ans : option c

- a) to discriminate

- b) to work on original media
- c) to honor property rights , copyrights and patents
- d) to display bias or prejudice in findings or observation

99. Which of the following are sources of digital evidences?

ans : optiond

- a) Internet based files
- b) Stand-alone computers or devices
- c) Mobile devices
- d) All of the above