

**MCQ's Question and Answers (the answers are highlighted in bold)**

**Q1.**When the Federal Bureau of investigation was create ?.

- A)1900      B)1980      C)19450      **D)1984**

**Q2.**What is The Full form of CART

- A)Computer Analysis and Response Team**      B) Cathode Analog Ray Tube  
C)Computer Accessories Repairing team      D)None

**Q3** When IOCE is Formed

- A)1992      B)1980      C)19490      **D)1995**

**Q4**Full Form Of IOCE

- A)International Organization on Computer Evidence**      B)Internet of Computer Education  
C) Internet of Computer Evidence      D)None

**Q5**When was the first FBI Regional Computer Forensic laboratory was Recognize ?.

- A)1992      B)1980      C)19490      **D)2000**

**Q6**How Many Rules in Digital forensic

- A)12      B)19      C)10      **D)6**

**Q7** What is the Long form of DFI

- A)Digital Forensic Investigation**      B)Digital Fraud Industry  
C)Defining Form In      D)None

**Q8** How Many Phases in **RDMDFR**

- A)12      B)19      C)10      **D)6**

**Q9** Investigator should satisfy the following point:

- A)Contribute to the society and human being      B)Avoid harm to others  
C)honest and trustworthy      **D)All Of the Above**

**Q10** Who proposed Road Map Model

- A)G. Gunsh      B)S. Ciardhuain      C)J. Korn      **D)G. Palmar**

**Q11** Digital Evidence in the form of the:

- A)Office File      B)E-mail Messages      C)Either A or B      **D)Both A and B**

**Q12** In Computer intrusions the attacker will be leave multiple traces of there presence in:

- A)File System   B)Registry   C)System Logs   **D)All of the Above**

**Q13** What are the Form of Electronic Evidence:

- A)Hard Drive   B)E-mail   C)Either A or B   **D)Both A and B**

**Q14** How Many Types of the Evidence

- A)12   B)19   C)10   **D)6**

**Q15** What is the full form of **BPO**

**A)Business Process Outsourcing**

**Q16** The Digital evidence are used to established a credible link between.....

- A)Attacker and victim and the crime scene**   B)Attacker And information  
C)Either A or B   D)Both A and B

**Q17** The evidence and proof that can be obtained from the electronic source is called the.....

- A)Digital Evidence**   B)Explainable evidence   C)Either A or B   D)Both A and B

**Q18** Which of the following is not type of volatile evidence:

- A)Routing Tables   B) Main Memory   C)Log Files   **D) Cached Data**

**Q19** Digital Evidence must follow the requirement of the

- A)Ideal Evidence Rule   B)Best Evidence Rule   C)Exchange Rule   **D)All of the mentioned**

**Q20** White hat Hacker is known as the

- A)Cracker   **B)Ethical**   C)Grey Hat   D)Script Kiddies

**Q21** What is an grey hat hacker

- A)Black Hat Hacker   B)White Hat Hacker   **C)Combination of White and black hat hackers** D)None

**Q22** A Hacker who identifies and exploits weakness in telephones instead of computers is known as:

- A)Phreaker**   B)Hacktivist   C)Ethical hacker   D)Grey Hat hacker

**Q23** Long Form of the VPN

- A)Virtual Private Network**   B)Virtual Personal Network   C)Both   D)None

**Q24** Who are use their skill to identify security problem with computer network

- A)Black Hat Hacker   **B)Ethical Hacker**   C)Grey Hat hacker   D)Script Kiddies

**Q25** To crack the password you need cracking tool such as:

A)LC4            B)John The Ripper            C)pwdump            **D)All of the above**

**Q26** NMAP known as:

**A)Network Mapper**            B)NetCat            C)SuperScan            D)NetScan

**Q27** What is the most valuable assets of an organization

**A)Information**

**Q28** What is the full form of SMTP

**A)Simple mail Transfer Protocol**

**Q29** What is the full form of DNS

**A)Domain Name System**            B)Simple mail Transfer Protocol

C)Internet Message Access Protocol            D) Network Mapper

**Q30** What is the full form of IMAP

**A)Internet Message Access Protocol**            B)Simple mail Transfer Protocol

C)Internet Message Access Protocol            D)None

**Q31** What is the full form of SNMP

**A)Simple Network Management Protocol**

**Q32** Which of the following used for the Network Testing and port scanning

A)NetCat            B)SuperScan            C)NetScan            **D)All of Above**

**Q33** The whole email server may be targeted for a complete interruption of services with these failure like

**A)Storage overload and bandwidth blocking**

**Q34** Which is the top most directory in the server file system

**A)Root Directory**

**Q35** Which list is used in the authorization process

**A)Access Control List**

**Q36** What is the latest version of UNIX

**A)LINUX**

**Q37** Which OS is widely used in the world

**A)Windows**    B)LINUX    C)IOS    D)NONE

**Q38** Name of network analyzer which support windows and unix OS

**A)Ethereal**

**Q39** You can grab banner by using

A)Telnet    B)NetCat    C)Either A or B    **D)Both A and B**

**Q40** An attacker can create an ..... attack by sending hundreds or thousands of emails with very large attachment

**A)Attachment Overloading Attack**    B)Connection Attack    C)Auto Responder Attack

D)All of the Above

**1. An Artificial Intelligence system developed by Terry A. Winograd to permit an interactive dialogue about a domain he called blocks-world.**

a. SIMD

b. STUDENT

c. **SHRDLU**

d. BACON

**2. What is Artificial intelligence?**

a. Programming with your own intelligence

b. Putting your intelligence into Computer

c.**Making a Machine intelligent**

d.Playing a Game

3. Who is the “father” of artificial intelligence?

- a. John McCarthy
- b. Fisher Ada**
- c. Allen Newell
- d. Alan Turning

4. Which of the following is a proposed means of testing the intelligence of the machine?

**Turing Test**Turning TestTuning Test

- a. Turing Test**
- b. Turning Test
- c. Tuning Test
- d. None

5. Which of the following is not a component of a production system?

- a. Control System
- b. Associative Memory**
- c. Primary Memory
- d. Secondary Memory

6. Zero sum game has player...

- a. seven
- b. Two
- c. three player
- d. Multiplayer**

7. Which one is used for compute the logical inference algorithm?

- a. Validity
- b. Satisfiability
- c. Logical equivalence
- d. All of these**

**8.Single inference rule also called...**

**a. Resolution**

b. Reference

c.Reference

d.None of these

**9.Factoring means...**

a.Removal of redundant literal

**b.Removal of redundant variable**

c.Addition of redundant variable

d.Addition of redundant literal

1. A valid definition of digital evidence is:

a. Data stored or transmitted using a computer

b. Information of probative value

**c. Digital data of probative value**

d. Any digital evidence on a computer

2. What are the three general categories of computer systems that can contain digital evidence?

a. Desktop, laptop, server

b. Personal computer, Internet, mobile telephone

c. Hardware, software, networks

**d. Open computer systems, communication systems, embedded systems**

3. In terms of digital evidence, a hard drive is an example of:

**a. Open computer systems**

b. Communication systems

c. Embedded computer systems

d. None of the above

4. In terms of digital evidence, a mobile telephone is an example of:

a. Open computer systems

b. Communication systems

**c. Embedded computer systems**

d. None of the above

5. In terms of digital evidence, a Smart Card is an example of:

a. Open computer systems

b. Communication systems

**c. Embedded computer systems**

d. None of the above

6. In terms of digital evidence, the Internet is an example of:

- a. Open computer systems
- b. Communication systems**
- c. Embedded computer systems
- d. None of the above

7. Computers can be involved in which of the following types of crime?

- a. Homicide and sexual assault
- b. Computer intrusions and intellectual property theft
- c. Civil disputes
- d. All of the above**

8. A logon record tells us that, at a specific time:

- a. An unknown person logged into the system using the account
- b. The owner of a specific account logged into the system
- c. The account was used to log into the system**
- d. None of the above

9. Cybertrails are advantageous because:

- a. They are not connected to the physical world.
- b. Nobody can be harmed by crime on the Internet.
- c. They are easy to follow.
- d. Offenders who are unaware of them leave behind more clues than they otherwise would have.**

10. Private networks can be a richer source of evidence than the Internet because:

- a. They retain data for longer periods of time.
- b. Owners of private networks are more cooperative with law enforcement.
- c. Private networks contain a higher concentration of digital evidence.**
- d. All of the above.

**Question 1. Which of the following statements best describes a white-hat hacker?**

- A. Security professional
- B. Former black hat
- C. Former grey hat
- D. Malicious hacker

**Answer 1. Option A.**

**Question 2. A security audit performed on the internal network of an organization by the network administration is also known as \_\_\_\_\_.**

- A. Grey-box testing
- B. Black-box testing
- C. White-box testing
- D. Active testing
- E. Passive testing

**Answer 2. Option C..**

**Question 3. What is the first phase of hacking?**

- A. Attack
- B. Maintaining access
- C. Gaining access
- D. Reconnaissance
- E. Scanning

**Answer 3. Option D.**

**Question 4. What type of ethical hack tests access to the physical infrastructure?**

- A. Internal network
- B. Remote network
- C. External network
- D. Physical access

**Answer 4. Option D**

**Question 5. The security, functionality, and ease of use triangle illustrates which concept?**

- A. As security increases, functionality and ease of use increase.
- B. As security decreases, functionality and ease of use increase.
- C. As security decreases, functionality and ease of use decrease.
- D. Security does not affect functionality and ease of use.

**Answer 5. Option B.**



**Question 6. Which type of hacker represents the highest risk to your network?**

- A. Disgruntled employees
- B. Black-hat hackers
- C. Grey-hat hackers
- D. Script kiddies

**Answer 6.** Option A.

**Question 7. What are the three phases of a security evaluation plan? (Choose three answers.)**

- A. Conduct Security Evaluation
- B. Preparation
- C. Conclusion
- D. Final
- E. Reconnaissance
- F. Design Security
- G. Vulnerability Assessment

**Answer 7.** Options A, B, C.

**Question 8. Hacking for a cause is called \_\_\_\_\_.**

- A. Active hacking
- B. Hacktivism
- C. Activism
- D. Black-hat hacking

**Answer 8.** Option B.

**Question 9. Which federal law is most commonly used to prosecute hackers?**

- A. Title 12
- B. Title 18
- C. Title 20
- D. Title 2

**Answer 9.** Option B.

**Question 10. When a hacker attempts to attack a host via the Internet it is known as what type of attack?**

- A. Remote attack
- B. Physical access
- C. Local access
- D. Internal attack

**Answer 10.** Option A.

1. Hackers who help in finding bugs and vulnerabilities in a system & don't intend to crack a system are termed as \_\_\_\_\_

- a) Black Hat hackers
- b) White Hat Hackers
- c) Grey Hat Hackers
- d) Red Hat Hackers

Answer: b

2. Which is the legal form of hacking based on which jobs are provided in IT industries and firms?

- a) Cracking
- b) Non ethical Hacking
- c) Ethical hacking
- d) Hactivism

Answer: c

3. They are nefarious hackers, and their main motive is to gain financial profit by doing cyber crimes. Who are "they" referred to here?

- a) Gray Hat Hackers
- b) White Hat Hackers
- c) Hactivists
- d) Black Hat Hackers

Answer: d

4. \_\_\_\_\_ are the combination of both white as well as black hat hackers.

- a) Grey Hat hackers
- b) Green Hat hackers
- c) Blue Hat Hackers
- d) Red Hat Hackers

Answer: a

5. The amateur or newbie in the field of hacking who don't have many skills about coding and in-depth working of security and hacking tools are called \_\_\_\_\_

- a) Sponsored Hackers
- b) Hactivists
- c) Script Kiddies
- d) Whistle Blowers

Answer: c

6. Suicide Hackers are those \_\_\_\_\_

- a) who break a system for some specific purpose with or without keeping in mind that they may suffer long term imprisonment due to their malicious activity
- b) individuals with no knowledge of codes but an expert in using hacking tools
- c) who know the consequences of their hacking activities and hence try to prevent them by erasing their digital footprints
- d) who are employed in an organization to do malicious activities on other firms

Answer: a

7. Criminal minded individuals who work for terrorist organizations and steal information of nations and other secret intelligence are \_\_\_\_\_

- a) State sponsored hackers
- b) Blue Hat Hackers
- c) Cyber Terrorists
- d) Red Hat Hackers

Answer: c

8. One who disclose information to public of a company, organization, firm, government and private agency and he/she is the member or employee of that organization; such individuals are termed as \_\_\_\_\_

- a) Sponsored hackers
- b) Crackers
- c) Hactivist
- d) Whistleblowers

Answer: d

9. These types of hackers are the most skilled hackers in the hackers' community. Who are "they" referred to?

- a) White hat Hackers
- b) Elite Hackers
- c) Licensed Penetration Testers
- d) Red Hat Hackers

Answer: b

10. \_\_\_\_\_ are those individuals who maintain and handles IT security in any firm or organization.

- a) IT Security Engineer
- b) Cyber Security Interns
- c) Software Security Specialist
- d) Security Auditor

Answer: a

11. Role of security auditor is to \_\_\_\_\_

- a) secure the network
- b) probe for safety and security of organization's security components and systems
- c) detects and prevents cyber attacks and threats to organization
- d) does penetration testing on different web applications

Answer: b

## Chapter 4 – Digital Evidences

1. Having a member of the search team trained to handle digital evidence:
  - a. Can reduce the number of people who handle the evidence
  - b. Can serve to streamline the presentation of the case
  - c. Can reduce the opportunity for opposing counsel to impugn the integrity of the Evidence
  - d. All of the above**
2. An attorney asking a digital investigator to find evidence supporting a particular line of Inquiry is an example of:
  - a. Influencing the examiner**
  - b. Due diligence
  - c. Quid pro quo
  - d. Voir dire
3. A digital investigator pursuing a line of investigation in a case because that line of Investigation proved successful in two previous cases is an example of:
  - a. Logical reasoning
  - b. Common sense
  - c. Preconceived theory**
  - d. Investigator's intuition
4. A scientific truth attempts to identify roles that are universally true. Legal judgment, on The other hand, has a standard of proof in criminal prosecutions of:
  - a. Balance of probabilities
  - b. Beyond a reasonable doubt**
  - c. Acquittal
  - d. None of the above
5. Regarding the admissibility of evidence, which of the following is not a consideration:
  - a. Relevance
  - b. Authenticity
  - c. Best evidence
  - d. Nominally prejudicial**
6. According to the text, the most common mistake that prevents evidence seized from Being admitted is:
  - a. Uninformed consen
  - b. Forcible entry
  - c. Obtained without authorization**
  - d. None of the above

7. In obtaining a warrant, an investigator must convince the judge on all of the following Points except:
- a. Evidence of a crime is in existence
  - b. A crime has been committed
  - c. The owner or resident of the place to be searched is likely to have committed The crime**
  - d. The evidence is likely to exist at the place to be searched
8. If, while searching a computer for evidence of a specific crime, evidence of a new, Unrelated crime is discovered, the best course of action is:
- a. Abandon the original search, and pursue the new line of investigation
  - b. Continue with the original search but also pursue the new inquiry
  - c. Stop the search and obtain a warrant that addresses the new inquiry**
  - d. Continue with the original search, ignoring the new information
9. The process of documenting the seizure of digital evidence and, in particular, when that Evidence changes hands, is known as:
- a. Chain of custody**
  - b. Field notes
  - c. Interim report
  - d. None of the above
10. Evidence contained in a document provided to prove that statements made in court are True is referred to as:
- a. Inadmissible evidence
  - b. Illegally obtained evidence
  - c. Hearsay evidence**
  - d. Direct evidence

## Chapter 5 Basics of Ethical hacking

1. What is the ethics behind training how to hack a system?
  - a) To think like hackers and know how to defend such attacks
  - b) To hack a system without the permission
  - c) To hack a network that is vulnerable
  - d) To corrupt software or service using malwareAnswer: a
  
2. Performing a shoulder surfing in order to check other's password is \_\_\_\_\_ ethical practice.
  - a) a good
  - b) not so good
  - c) very good social engineering practice
  - d) a badAnswer: d
  
3. \_\_\_\_\_ has now evolved to be one of the most popular automated tools for unethical hacking.
  - a) Automated apps
  - b) Database software
  - c) Malware
  - d) WormsAnswer: c
  
4. Leaking your company data to the outside network without prior permission of senior authority is a crime.
  - a) True
  - b) FalseAnswer: a
  
5. \_\_\_\_\_ is the technique used in business organizations and firms to protect IT assets.
  - a) Ethical hacking
  - b) Unethical hacking
  - c) Fixing bugs
  - d) Internal data-breachAnswer: a

6. The legal risks of ethical hacking include lawsuits due to \_\_\_\_\_ of personal data.
- a) stealing
  - b) disclosure
  - c) deleting
  - d) hacking
- Answer: b
7. Before performing any penetration test, through legal procedure, which key points listed below is not mandatory?
- a) Know the nature of the organization
  - b) Characteristics of work done in the firm
  - c) System and network
  - d) Type of broadband company used by the firm
- Answer: d
8. An ethical hacker must ensure that proprietary information of the firm does not get leaked.
- a) True
  - b) False
- Answer: a
9. After performing \_\_\_\_\_ the ethical hacker should never disclose client information to other parties.
- a) hacking
  - b) cracking
  - c) penetration testing
  - d) exploiting
- Answer: c
10. \_\_\_\_\_ is the branch of cyber security that deals with morality and provides different theories and a principle regarding the view-points about what is right and wrong.
- a) Social ethics
  - b) Ethics in cyber-security
  - c) Corporate ethics
  - d) Ethics in black hat hacking
- Answer: d



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- Answer: d

## Chapter 6 Types of hackers

**Question 1. Which of the following statements best describes a white-hat hacker?**

- A. Security professional
- B. Former black hat
- C. Former grey hat
- D. Malicious hacker

**Answer.** Option A.

**Question 2. A security audit performed on the internal network of an organization by the network administration is also known as \_\_\_\_\_.**

- A. Grey-box testing
- B. Black-box testing
- C. White-box testing
- D. Active testing
- E. Passive testing

**Answer.** Option C.

**Question 3. What is the first phase of hacking?**

- A. Attack
- B. Maintaining access
- C. Gaining access
- D. Reconnaissance
- E. Scanning

**Answer.** Option D.

**Question 4. What type of ethical hack tests access to the physical infrastructure?**

- A. Internal network
- B. Remote network
- C. External network
- D. Physical access

**Answer.** Option D.

**Question 5. The security, functionality, and ease of use triangle illustrates which concept?**

- A. As security increases, functionality and ease of use increase.
- B. As security decreases, functionality and ease of use increase.
- C. As security decreases, functionality and ease of use decrease.
- D. Security does not affect functionality and ease of use.

**Answer.** Option B.

**Question 6. Which type of hacker represents the highest risk to your network?**

- A. Disgruntled employees
- B. Black-hat hackers
- C. Grey-hat hackers
- D. Script kiddies

**Answer.** Option A.

**Question 7. What are the three phases of a security evaluation plan? (Choose three answers.)**

- A. Conduct Security Evaluation
- B. Preparation
- C. Conclusion
- D. Final
- E. Reconnaissance
- F. Design Security
- G. Vulnerability Assessment

**Answer.** Options A, B, C.

**Question 8. Hacking for a cause is called \_\_\_\_\_.**

- A. Active hacking
- B. Hacktivism
- C. Activism
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**Answer.** Option B.

**Question 9. Which federal law is most commonly used to prosecute hackers?**

- A. Title 12
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**Question 10. When a hacker attempts to attack a host via the Internet it is known as what type of attack?**

- A. Remote attack
- B. Physical access
- C. Local access
- D. Internal attack

**Answer.** Option A.

## **Chapter-3 Basics of Digital Forensics**

**1. Digital forensics is all of them except:**

- A. Extraction of computer data.
- B. Preservation of computer data.
- C. Interpretation of computer data.
- D. Manipulation of computer data.

**Ans:D**

**2. IDIP stands for**

- A. Integrated Digital Investigation Process.
- B. Integrated Data Investigator Process.
- C. Integrated Digital Investigator Process.
- D. Independent Digital Investigator Process.

**Ans: A**

**3. Who proposed Road Map for Digital Forensic Research (RMDFR)**

- A. G.Gunsh.
- B. S.Ciardhuain
- C. J.Korn.
- D. G.Palmar

**Ans: D**

**4. Investigator should satisfy following points:**

- A. Contribute to society and human being.
- B. Avoid harm to others.
- C. Honest and trustworthy.
- D. All of the above

**Ans: D**

**5. In the past, the method for expressing an opinion has been to frame a \_\_\_\_ question based on available factual evidence.**

- A. Hypothetical
- B. Nested
- C. Challenging
- D. Contradictory

**Ans: A**

**6. More subtle because you are not aware that you are running these macros (the document opens and the application automatically runs); spread via email**

- A. The purpose of copyright
- B. Danger of macro viruses
- C. Derivative works
- D. computer-specific crime

**Ans: B**

**7. There are three c's in computer forensics. Which is one of the three?**

- A. Control
- B. Chance
- C. Chains
- D. Core

**Ans: A**

**8. When Federal Bureau Investigation program was created?**

- A.1979
- B.1984
- C.1995
- D.1989

**Ans: B**

**9. When the field of PC forensics began?**

- A.1960's
- B.1970's
- C.1980's
- D.1990's

**Ans: C**

**10. \_\_\_\_\_phase includes putting the pieces of a digital puzzle together and developing investigative hypotheses**

- A. Preservation phase
- B. Survey phase
- C. Documentation phase
- D. Reconstruction phase
- E. Presentation phase

**Ans: D**

## 10 MCQs from Each Chapter of Emerging Trend in Computer Science

### Chapter 1 Artificial Intelligence

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#### 1. What is Artificial intelligence?

- (A) Putting your intelligence into Computer
- (B) Programming with your own intelligence
- (C) Making a Machine intelligent**
- (D) Playing a Game

**Ans: C**

#### 2. Which is not the commonly used programming language for AI?

- (A) PROLOG
- (B) Java
- (C) LISP
- (D) Perl**

**Ans: D**



### **3. What is state space?**

- (A) The whole problem
- (B) Your Definition to a problem
- (C) Problem you design
- (D) Representing your problem with variable and parameter**

**Ans: D**

### **4. A production rule consists of**

- (A) A set of Rule
- (B) A sequence of steps
- (C) Both (a) and (b)**
- (D) Arbitrary representation to problem

**Ans: C**

### **5. Which search method takes less memory?**

- (A) Depth-First Search**
- (B) Breadth-First search
- (C) Both (A) and (B)
- (D) Linear Search.

**Ans: A**

### **6.A heuristic is a way of trying**

- (A) To discover something or an idea embedded in a program
- (B) To search and measure how far a node in a search tree seems to be from a goal
- (C) To compare two nodes in a search tree to see if one is better than the other
- (D) Only (a), (b) and (c).**

**Ans: D**

### **7. A\* algorithm is based on**

- (A) Breadth-First-Search
- (B) Depth-First –Search
- (C) Best-First-Search**
- (D) Hill climbing.

**Ans: C**

### **8. Which is the best way to go for Game playing problem?**

- (A) Linear approach
- (B) Heuristic approach**
- (C) Random approach
- (D) Optimal approach

**Ans: B**

### **9. How do you represent “All dogs have tails”.**

- (A)  $\forall x: \text{dog}(x) \rightarrow \text{has tail}(x)$**
- (B)  $\forall x: \text{dog}(x) \rightarrow \text{has tail}(y)$
- (C)  $\forall x: \text{dog}(y) \rightarrow \text{has tail}(x)$
- (D)  $\forall x: \text{dog}(x) \rightarrow \text{has tail}(x)$

**Ans: A**

**10. Which is not a property of representation of knowledge?**

- (A) **Representational Verification**      (B) Representational Adequacy  
(C) Inferential Adequacy      (D) Inferential Efficiency

**Ans: A**

## Chapter-2 Internet of Things

---

**1. Embedded systems are\_\_\_\_\_**

A. General purpose

**B. Special purpose**

**Ans: B**

**2. Embedded system is\_\_\_\_\_**

A. An electronic system

B. A pure mechanical system

C. An electro-mechanical system

**D. (A) or (C)**

**Ans: D**

**3. Which of the following is not true about embedded systems?**

A. Built around specialized hardware

B. Always contain an operating system

C. Execution behavior may be deterministic

**D. None of these**

**Ans: D**

**4. Which of the following is not an example of a “small-scale embedded system”?**

- A. Electronic Barbie doll
- B. Simple calculator
- C. Cell phone**
- D. Electronic toy car

**Ans: C**

**5. The first recognized modern embedded system is**

- A. Apple computer
- B. Apollo Guidance Computer (AGC)**
- C. Calculator
- D. Radio navigation system

**Ans: B**

**6. The first mass produced embedded system is**

- A. Minuteman-I
- B. Minuteman-II
- C. Autonetics D-17**
- D. Apollo Guidance Computer (AGC)

**Ans: C**

**7. Which of the following is an (are) an intended purpose(s) of embedded systems?**

- A. Data collection
- B. Data processing
- C. Data communication

**D. All of these**

**Ans: D**

**8. Which of the following is (are) example(s) of embedded system for data communication?**

- A. Network router
- B. Digital camera**
- C. Music player

D. All of these

**Ans: B**

**9. What are the essential tight constraint/s related to the design metrics of an embedded system?**

- A. Ability to fit on a single chip
- B. Low power consumption
- C. Fast data processing for real-time operations

**D .All of the above**

**Ans: D**

**10. A digital multi meter is an example of an embedded system for**

A. Data communication

**B. Monitoring**

C. Control

D. All of these

**Ans: B**

### **Chapter-3 Basics of Digital Forensics**

---

**1. Digital forensics is all of them except:**

(A) Extraction of computer data.

(B) Preservation of computer data.

(C) Interpretation of computer data.

**(D) Manipulation of computer data.**

**Ans:D**

**2. IDIP stands for**

**(A) Integrated Digital Investigation Process.**

(B) Integrated Data Investigator Process.

(C) Integrated Digital Investigator Process.

(D)Independent Digital Investigator Process.

**Ans: A**

**3. Who proposed Road Map for Digital Forensic Research (RMDFR)**

- (A) G.Gunsh.
- (B) S.Ciardhuain
- (C) J.Korn.
- (D) G.Palmar**

**Ans: D**

**4. Investigator should satisfy following points:**

- (A) Contribute to society and human being.
- (B) Avoid harm to others.
- (C) Honest and trustworthy.
- (D) All of the above**

**Ans: D**

5. In the past, the method for expressing an opinion has been to frame a \_\_\_\_ question based on available factual evidence.

- (A) Hypothetical**
- (B) Nested
- (C) Challenging
- (D) Contradictory

**Ans: A**



**6. More subtle because you are not aware that you are running these macros**

(A) The purpose of copyright

**(B) Danger of macro viruses**

(C) Derivative works

(D) computer-specific crime

**Ans: B**

**7. There are three c's in computer forensics. Which is one of the three?**

**(A) Control**

(B) Chance

(C) Chains

(D) Core

**Ans: A**

**8. When Federal Bureau Investigation program was created?**

(A) 1979

**(B) 1984**

(C) 1995

(D) 1989

**Ans: B**

**9. When the field of PC forensics began?**

(A) 1960's

(B) 1970's

**(C) 1980's**

(D) 1990's

**Ans: C**

### **10. What is Digital Forensic?**

(A) Process of using scientific knowledge in analysis and presentation of evidence in court

**(B) The application of computer science and investigative procedures for a legal purpose involving the analysis of digital evidence after proper search authority, chain of custody, validation with mathematics, use of validated tools, repeatability, reporting, and possible expert presentation**

(C) process where we develop and test hypotheses that answer questions about digital events

(D) Use of science or technology in the investigation and establishment of the facts or evidence in a court of law

**Ans: B**

## Chapter 4- Digital Evidence

---

**1. A valid definition of digital evidence is:**

- A. Data stored or transmitted using a computer
- B. Information of probative value

**C. Digital data of probative value**

- D. Any digital evidence on a computer

**Ans: C**

**2. What are the three general categories of computer systems that can contain digital evidence?**

- A. Desktop, laptop, server
- B. Personal computer, Internet, mobile telephone
- C. Hardware, software, networks

**D. Open computer systems, communication systems, and embedded systems**

**Ans: D**

**3. In terms of digital evidence, a hard drive is an example of:**

- A. Open computer systems**
- B. Communication systems
- C. Embedded computer systems
- D. None of the above

**Ans: A**

**4. In terms of digital evidence, a mobile telephone is an example of:**

- A. Open computer systems
- B. Communication systems
- C. Embedded computer systems**
- D. None of the above

**Ans: C**

**5. In terms of digital evidence, a Smart Card is an example of:**

- A. Open computer systems
- B. Communication systems
- C. Embedded computer systems**
- D. None of the above

**Ans: C**

**6. In terms of digital evidence, the Internet is an example of:**

- A. Open computer systems
- B. Communication systems**
- C. Embedded computer systems
- D. None of the above

**Ans: B**

**7. Computers can be involved in which of the following types of crime?**

- A. Homicide and sexual assault
- B. Computer intrusions and intellectual property theft
- C. Civil disputes
- D. All the above**

**Ans: D**

**8. A logon record tells us that, at a specific time:**

- A. An unknown person logged into the system using the account
- B. The owner of a specific account logged into the system
- C. The account was used to log into the system**
- D. None of the above

**Ans: C**

**9. Cyber trails are advantageous because:**

A. They are not connected to the physical world.

B. Nobody can be harmed by crime on the Internet.

C. They are easy to follow.

**D. Offenders who are unaware of them leave behind more clues than they otherwise would have.**

**Ans: D**

**10. Private networks can be a richer source of evidence than the Internet because:**

A. They retain data for longer periods of time.

B. Owners of private networks are more cooperative with law enforcement.

**C. Private networks contain a higher concentration of digital evidence.**

D. All the above.

**Ans: C**

## Chapter 5 Basics of Hacking (CO5)

---

**1. Ethical Hacking is also known as \_\_\_\_\_**

- A. Black Hat Hacking.
- B. White Hat Hacking.
- C. Encryption.
- D. None of these.

**Ans. B**

**2. Tool(s) used by ethical hacker\_\_\_\_\_.**

- A. Scanner
- B. Decoder
- C. Proxy
- D. All of these.**

**Ans. D**

**3. Vulnerability scanning in Ethical hacking finds\_\_\_\_\_.**

- A. Strengths.
- B. Weakness.**
- C. A & B
- D. None of these.

**Ans. B**

**4. Ethical hacking will allow to \_\_\_\_ all the massive security breaches.**

A. Remove.

**B. Measure.**

C. Reject.

D. None of these.

**Ans. B**

**5. Sequential step hackers use are: \_ \_ \_ \_.**

A. Maintaining Access.

B. Reconnaissance

C. Scanning.

D. Gaining Access.

**A. B, C, D, A**

B. B, A, C, D

C. A, B, C, D

D. D, C, B, A

**Ans. A**



**6. \_\_\_\_\_ is the art of exploiting the human elements to gain access to the authorized user.**

**A. Social Engineering.**

B. IT Engineering.

C. Ethical Hacking.

D. None of the above.

**Ans. A**

**7. Which hacker refers to ethical hacker?**

A. Black hat hacker.

**B. White hat hacker.**

C. Grey hat hacker.

D. None of the above.

**Ans. B**

**8. The term cracker refers to \_\_\_\_\_**

**A. Black hat hacker.**

B. White hat hacker.

C. Grey hat hacker.

D. None of the above.

**Ans. A**

**9. Who described a dissertation on fundamentals of hacker's attitude?**

A. G. Palma.

**B. Raymond.**

C. Either.

D. Jhon Browman.

**Ans. B**

**10. Computer Hackers have been in existence for more than a \_\_\_\_.**

A. Decade.

B. Year.

**C. Century**

D. Era.

**Ans. C**

## Chapter-6 Types of Hacking (CO6)

---

**1. SNMP stands for\_\_\_\_\_**

- A. Simple Network Messaging Protocol
- B. Simple Network Mailing Protocol
- C. Simple Network Management Protocol**
- D. Simple Network Master Protocol

**Ans: C**

**2. Which of the following tool is used for Network Testing and port Scanning\_\_\_\_\_**

- A. NetCat
- B. SuperScan
- C. NetScan
- D. All of above**

**Ans: D**

**3. Banner grabbing is used for**

- A. White Hat Hacking**
- B. Black Hat Hacking
- C. Grey Hat Hacking
- D. Script Kiddies

**Ans: A**

**4. An attacker can create an \_\_\_\_\_ attack by sending hundreds or thousands of e-mails with very large attachments.**

A. Connection Attack

**B. Auto responder Attack**

C. Attachment Overloading Attack

D. All the above

**Ans: B**

**5. Which of the following tool is used for Windows for network queries from DNS lookups to trace routes?**

**A. Sam Spade**

B. SuperScan

C. NetScan

D. Netcat

**Ans: A**

**6. Which tool is used for ping sweeps and port scanning?**

A. Netcat

B. SamSpade

**C. SuperScan**

D. All the above

**Ans: C**

**7. Which of the following tool is used for security checks as port scanning and firewall testing?**

**A. Netcat**

B. Nmap

C. Data communication

D. Netscan

**Ans: A**

**8. What is the most important activity in system cracking?**

A. Information gathering

**B. Cracking password**

C. Escalating privileges

D. Covering tracks

**Ans: B**

**9. Which Nmap scan is does not completely open a TCP connection?**

**A. SYN stealth scan**

B. TCP scan

C. XMAS tree scan

D. ACK scan

**Ans: A**

**10.Key loggers are form of**

**A. Spyware**

B. Shoulder surfing

C. Trojan

D. Social engineering

**Ans: A**

## MCQ EMERGING TRENDS

### Chapter 1: - artificial intelligence

- 1) *is a branch of science which deals with helping machine find solution to complex to problem in a more human like a fashion.*  
**(a) Artificial intelligence**  
(b) Internet of think  
(c) Embided system  
(d) Cyber security
- 2) *Is a message that consist relavat meaning , implication , or input for decision and or action.*  
(a) Data  
**(b) Information**  
(c) Knowledge  
(d) Intelligence
- 3) *The goal is for the software to use what is it is was learned in one area to solve problem in other area.*  
(a) Machine learning  
**(b) Deep learning**  
(c) Neural network  
(d) All of above
- 4) *the consist of computer program that mimic the way the human brain process information.*  
(a) Machine learning  
(b) Deep learning  
**(c) Neural learning**  
(d) All of this
- 5) *A heuristic is a rule of thumb-----*  
(a) Strategy  
(b) Trick  
(c) Simplification  
**(d) All of above**
- 6) *The component of AI concept of-----*  
(a) Logic  
(b) Congition

(c) Computation

**(d) All of above**

**7) Is branch of science that deals with programming the system in such that they automatically learn with experience**

**(a) Machine learning**

(b) Deep earning

(c) Neural learning

(d) All of above

**8) The first AI programming language was called**

(a) Basic

**(b) IPL**

(c) FORIRAN

(d) LISP

**9) The characteristic of the computer system cable of thinking, reasoning and learning is know as**

(a) Machine intelligence

(b) Human intelligence

**(c) Artificial intelligence**

(d) Virtual intelligence

**10) There are how many dimensions of AI**

(a) Four

(b) Two

**(c) Three**

(d) One



## **Chapter 2:- internet of things**

1. \_\_\_\_\_ allows us to control electronic components

- a) **RETful API**
- b) RESTful API
- c) HTTP
- d) MQTT

2. **MQTT stands for** \_\_\_\_\_

- a) MQ Telemetry Things
- b) MQ Transport Telemetry
- c) MQ Transport Things
- d) **MQ Telemetry Transport**

3. **MQTT is better than HTTP for sending and receiving data.**

- a) **True**
- b) False

4. **MQTT is** \_\_\_\_\_ **protocol.**

- a) Machine to Machine
- b) Internet of Things
- c) **Machine to Machine and Internet of Things**
- d) Machine things

5. **Which protocol is lightweight?**

- a) **MQTT**
- b) HTTP
- c) CoAP

6. **PubNub publishes and subscribes** \_\_\_\_\_ **in order to send and receive messages.**

- a) Network
- b) Account
- c) Portal
- d) **Keys**

7. **By clicking which key the PubNub will display public, subscribe, and secret keys.**

- a) Pane
- b) **Demo Keyset**
- c) Portal
- d) Network

8. The `messageChannel` class declares the \_\_\_\_\_ class attribute that defines the key string.

- a) `command_key`
- b) `command-key`
- c) `commandkey`
- d) `Key_command`

9. \_\_\_\_\_ method saves the received arguments in three attributes.

- a) `__Init`
- b) `Init__`
- c) `__Init__`
- d) `_init_`

10. \_\_\_\_\_ and \_\_\_\_\_ saves the publish and subscribe keys that we have generated with the PubNub Admin portal.

- a) `public_key` and `subscribe_key`
- b) `Public-key` and `subscribe-key`
- c) `publickey` and `subscribekey`
- d) `Key_public` and `key_subscribe`

### Chapter 3:- basic of digital forensic

1) The digital network divided radio frequency into time slots

- (a) TQMA
- (b) COMA
- (c) EDMA
- (d) EDGE

2) When cases go to trial forensics examiner can play one of role

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

3) Forensics is the systematic trucking of incoming and outgoing ruffic on your network

- (a) Network
- (b) Computer
- (c) Criminal
- (d) Server

- 4) *Validate your tools and verify your evidence with to ensure its integrity*
- (a) **Hashing algorithms**
  - (b) Steganography
  - (c) Watermark
  - (d) Digital certificates
- 5) *Is a written list of objection to certain testimony are exhibits*
- (a) Defendant
  - (b) Plaintiff
  - (c) Empanelling the jury
  - (d) **Motion in limine**
- 6) *Regarding the trail the term means rejecting potential jurors.*
- (a) Voir dire
  - (b) Rebuttal
  - (c) **Strikes**
  - (d) Venireman
- 7) *The evidences of proof that can be obtained from the electricity source is called the*
- (a) **Digital evidence**
  - (b) Demonstrative evidence
  - (c) Explainable evidence
  - (d) Substantial evidence
- 8) *If a micro-phone is present during your testimony, place it to eight to inches from you*
- (a) 3
  - (b) 5
  - (c) 4
  - (d) **6**
- 9) *Jurors typically average just over year of education and eight-grade reading level*
- (a) 11
  - (b) 9
  - (c) 10
  - (d) **12**

**10) The digital avoidance are use to stablsh a credible link between**

- (a) Attacker and victim and crime scene
- (b) Attacker and the crime scene
- (c) Victim and crime scene**
- (d) Attacker and information.

#### Chapter 4:- digital evidence

**1) A valid definition of digital evidence is**

- (a) data stored or transmitted using a computer
- (b) information of probative value
- (c) digital data of probative value**
- (d) any digital evidence an a computer

**2) Digital evidence , a hard drive is a example**

- (a) Open computer system**
- (b) Communication system
- (c) Embedded system
- (d) None of these

**3) The term of digital evidence the internet is an example of**

- (a) Open computer system
- (b) Communication system**
- (c) Embedded system
- (d) None of these

**4) Digital avoidance is a only useful in a counter of law**

- (a) True
- (b) False**

**5) What are the three general categories of computer system that can contain digital evidence**

- (a) Desktop ,laptop ,server
- (b) Personal computer
- (c) Hardware, software
- (d) Open computer system**

**6) In term of digital evidence , a smart card of use of example of**

- (a) Communication system
- (b) Open system
- (c) Embedded system**
- (d) None of above

**7) All of forensic examination should be perform on a original digital evidence**

- (a) True**
- (b) False

**8) The term of digital evidence, the internet is an example of**

- (a) Open computer system
- (b) Communication system**
- (c) Embedded system
- (d) None of these

**9) Private network can be a rich source of digital evidence than they internet**

- (a) They retain data for longer period of time
- (b) Owner of private network more cooperative with law enforcement
- (c) Private network contain higher concentration of digital evidence**
- (d) None of these

**10) Digital evidence can be duplicate exactly without any change to be original data**

- (a) True**
- (b) False

#### *Chapter 5:- basic of hackings*

- 1). What is the ethics behind training how to hack a system?**
  - a) To think like hackers and know how to defend such attacks**
  - b) To hack a system without the permission
  - c) To hack a network that is vulnerable
  - d) To corrupt software or service using malware

2). **Performing a shoulder surfing in order to check other's password is \_\_\_\_\_ ethical practice.**

- a) a good
- b) not so good
- c) very good social engineering practice
- d) **a bad**

3). \_\_\_\_\_ **has now evolved to be one of the most popular automated tools for unethical hacking.**

- a) Automated apps
- b) Database software
- c) **Malware**
- d) Worms

4). **Leaking your company data to the outside network without prior permission of senior authority is a crime.**

- a) **True**
- b) False

5). \_\_\_\_\_ **is the technique used in business organizations and firms to protect IT assets.**

- a) **Ethical hacking**
- b) Unethical hacking
- c) Fixing bugs
- d) Internal data-breach .

6) **The legal risks of ethical hacking include lawsuits due to \_\_\_\_\_ of personal data.**

- a) stealing
- b) **disclosure**
- c) deleting
- d) hacking

7). **Before performing any penetration test, through legal procedure, which key points listed below is not mandatory?**

- a) Know the nature of the organization
- b) Characteristics of work done in the firm
- c) System and network
- d) **Type of broadband company used by the firm**

8). **An ethical hacker must ensure that proprietary information of the firm does not get leaked.**

- a) **True**
- b) False

9). After performing \_\_\_\_\_ the ethical hacker should never disclose client information to other parties.

- a) hacking
- b) cracking
- c) **penetration testing**
- d) exploiting

10). \_\_\_\_\_ is the branch of cyber security that deals with morality and provides different theories and a principle regarding the view-points about what is right and wrong.

- a) Social ethics
- b) Ethics in cyber-security
- c) Corporate ethics
- d) **Ethics in black hat hacking**

Chapter 6:- type of hacking

1) Which of the following statement based describe a white hat hackers

- (a) **Security professional**
- (b) Former black hat
- (c) Former grey hat
- (d) Malicious hackers

2) **SNMP stand for**

- (a) simple network messegging protocol
- (b) simple network mailing protocol
- (c) **simple network management protocol**
- (d) simple network master protocol

3) **what is the first phase of hacking**

- (a) attack
- (b) maintaining access
- (c) gaining access
- (d) **reconnaissance**

4) **banner grabbing is often use for**

- (a) **white hat hacking**
- (b) black hat hacking
- (c) gray hat hacking
- (d) script kiddies

- 5) *an attack can create and attack by sending hundreds or thousand of e-mail with very large attachment*
- (a) *connection attack*
  - (b) *auto responder attack*
  - (c) *attachment overloading attack***
  - (d) *all of the above*
- 6) *what type of ethical hack test access to the physical infra structure*
- (a) *internal network*
  - (b) *remote network*
  - (c) *external network*
  - (d) *physical network***
- 7) *the security functinallity and ease of use triangle illustrated which concept*
- (a) *a security increase, functionality and ease of use increase*
  - (b) *a security decrease, functionality and ease of use increase***
  - (c) *a security increase, functionality and ease of use decrease*
  - (d) *security does not affect functionality and ease of use*
- 8) *which type of hackers represent the highest risk to your network*
- (a) *black hat hackers*
  - (b) *grey hat hackers*
  - (c) *disgruntled employees***
  - (d) *script kiddies*
- 9) *hackings for a causes is called*
- (a) *active hacking*
  - (b) *hacktivism***
  - (c) *activism*
  - (d) *black-hat-hackers*
- 10) *when a hackers attempt to attack a host via the internet is the know as what type of attack*
- (a) *remote attack***
  - (b) *local access*
  - (c) *internal attack*
  - (d) *physical access*



### Unit3. basics of digital forensics

1. What is Digital Forensic?

- a. Process of using scientific knowledge in analysis and presentation of evidence in court
- b. The application of computer science and investigative procedures for a legal purpose involving the analysis of digital evidence after proper search authority, chain of custody, validation with mathematics, use of validated tools, repeatability, reporting, and possible expert presentation
- c. A process where we develop and test hypotheses that answer questions about digital events
- d. Use of science or technology in the investigation and establishment of the facts or evidence in a court of law

2. Digital forensics is all of them except:

- a. Extraction of computer data.
- b. Preservation of computer data.
- c. Interpretation of computer data.
- d. Manipulation of computer data.

3. Which of the following is NOT focus of digital forensic analysis?

- a. Authenticity
- b. Comparison
- c. Proving
- d. Enhancement

4. Which of the following represents the step of scientific method?

I- Develop hypothesis based on evidence

II- Calculate hash value of evidence

III- Test the hypothesis to look for additional evidence

IV-make an imaging of the original evidence

- a. I and IV
- b. I and II
- c. II, III and IV
- d. All of above

5. What is the Primary Objectives of Digital Forensic for Business and Industry?

- a. Availability of service
- b. Prosecution
- c. Continuity of operation
- d. Security

6. Which of the following hold the highest value of evidence in the court?
- a. Documentary
  - b. Demonstrative
  - c. Testimonial
  - d. Real
6. Which of the following is FALSE?
- a. The digital forensic investigator must maintain absolute objectivity
  - b. It is the investigator's job to determine someone's guilt or innocence.
  - c. It is the investigator's responsibility to accurately report the relevant facts of a case.
  - d. The investigator must maintain strict confidentiality, discussing the results of an investigation on only a "need to know" basis
7. Which is following father of computer forensics
- a. M. Anderson
  - b. G. Gunsh
  - c. S. Ciardhuain
  - d. G. Palmar
8. Who proposed Road map model?
- a. G. Gunsh
  - b. S. Ciardhuain
  - c. J. Korn
  - d. G. Palmar
9. IDIP stands for
- a. Integrated Digital Investigation Process
  - b. Integrated Data Investigation Process
  - c. Integrated Digital Investigator Process
  - d. Independent Digital Investigation Process
10. When you give \_\_\_\_ testimony, you present this evidence and explain what it is and how it was obtained.
- a. technical/scientific
  - b. expert
  - c. lay witness
  - d. deposition

## Unit-4 Digital Evidences

1. A valid definition of digital evidence is:
  - a. Data stored or transmitted using a computer
  - b. Information of probative value
  - c. Digital data of probative value**
  - d. Any digital evidence on a computer
2. What are the three general categories of computer systems that can contain digital evidence?
  - a. Desktop, laptop, server
  - b. Personal computer, Internet, mobile telephone
  - c. Hardware, software, networks
  - d. Open computer systems, communication systems, embedded systems**
3. In terms of digital evidence, a hard drive is an example of:
  - a. Open computer systems**
  - b. Communication systems
  - c. Embedded computer systems
  - d. None of the above
4. In terms of digital evidence, a mobile telephone is an example of:
  - a. Open computer systems
  - b. Communication systems
  - c. Embedded computer systems**
  - d. None of the above
5. In terms of digital evidence, a Smart Card is an example of:
  - a. Open computer systems
  - b. Communication systems
  - c. Embedded computer systems**
  - d. None of the above
6. Digital evidence alone can be used to build a solid case.
  - a. True
  - b. False**
7. Personal computers and networks are often a valuable source of evidence. Those involved with \_\_\_\_\_ should be comfortable with this technology.
  - a. Criminal investigation
  - b. Prosecution
  - c. Defense work
  - d. All of the above**
8. An argument for including computer forensic training computer security specialists is:
  - a. It provides an additional credential.
  - b. It provides them with the tools to conduct their own investigations.
  - c. It teaches them when it is time to call in law enforcement.**
  - d. None of the above.

9. Digital evidence is only useful in a court of law.
- a. True
  - b. False**
10. In terms of digital evidence, the Internet is an example of:
- a. Open computer systems
  - b. Communication systems**
  - c. Embedded computer systems
  - d. None of the above

### Unit-5 Basics of Hacking

1. \_\_\_\_\_ is the branch of cyber security that deals with morality and provides different theories and a principle regarding the view-points about what is right and wrong.
  - a) Social ethics
  - b) Ethics in cyber-security
  - c) Corporate ethics
  - d) Ethics in black hat hacking**
2. What is the first phase of hacking?
  - a. Attack
  - b. Maintaining access
  - c. Gaining access
  - d. Reconnaissance
  - e. Scanning**
3. What is the one thing that old hackers were fond of or find interests in?
  - a) Breaking Other's system
  - b) Voracious thirst for knowledge**
  - c) Cracking Phone calls
  - d) Learning new languages
4. A penetration tester must identify and keep in mind the \_\_\_\_\_ & \_\_\_\_\_ requirements of a firm while evaluating the security postures.
  - a) privacy and security**
  - b) rules and regulations
  - c) hacking techniques
  - d) ethics to talk to seniors
5. What is the name of the first hacker's conference?
  - a) DEFCON**
  - b) OSCON
  - c) DEVCON
  - d) SECCON

6. After performing \_\_\_\_\_ the ethical hacker should never disclose client information to other parties.
  - a) hacking
  - b) cracking
  - c) penetration testing
  - d) exploiting
7. In which year the term hacking was coined?
  - a) 1965-67
  - b) 1955-60
  - c) 1970-80
  - d) 1980-82
8. From where the term 'hacker' first came to existence?
  - a) MIT
  - b) Stanford University
  - c) California
  - d) Bell's Lab
9. In which year, hacking became a practical crime and a matter of concern in the field of technology?
  - a) 1971
  - b) 1973
  - c) 1970
  - d) 1974
10. When a hacker attempts to attack a host via the Internet it is known as what type of attack?
  - a. Local access
  - b. Remote attack
  - c. Internal attack
  - d. Physical access
11. Which tool can be used to perform a DNS zone transfer on Windows?
  - a. DNSlookup
  - b. nslookup
  - c. whois
  - d. ipconfig

## Unit-6 Types of Hacking

1. Why would a hacker use a proxy server?
  - a. To create a stronger connection with the target.
  - b. To create a ghost server on the network.
  - c. To obtain a remote access connection.
  - d. To hide malicious activity on the network.
2. A security audit performed on the internal network of an organization by the network administration is also known as \_\_\_\_\_.
  - a. Grey-box testing
  - b. Black-box testing
  - c. White-box testing
  - d. Active testing E. Passive testing
3. Which are the four regional Internet registries?
  - a. APNIC, PICNIC, NANIC, RIPE NCC
  - b. APNIC, MOSTNIC, ARIN, RIPE NCC
  - c. APNIC, PICNIC, NANIC, ARIN
  - d. APNIC, LACNIC, ARIN, RIPE NCC
4. Attempting to gain access to a network using an employee's credentials is called the \_\_\_\_\_ mode of ethical hacking.
  - a. Local networking
  - b. Social engineering
  - c. Physical entry
  - d. Remote networking
5. What tool can be used to perform SNMP enumeration?
  - a. DNSlookup
  - b. Whois
  - c. Nslookup
  - d. IP Network Browser
6. What is the purpose of a Denial of Service attack?
  - a. Exploit a weakness in the TCP/IP stack
  - b. To execute a Trojan on a system
  - c. To overload a system so it is no longer operational
  - d. To shutdown services by turning them off
7. What port does Telnet use?
  - a. 22
  - b. 80
  - c. 20
  - d. 23

8. Performing hacking activities with the intent on gaining visibility for an unfair situation is called

- \_\_\_\_\_.
- a. Cracking
- b. Analysis
- c. **Hactivism**
- d. Exploitation

9. What protocol is the Active Directory database based on?

- a. **LDAP**
- b. TCP
- c. SQL
- d. HTTP

10 Which databases is queried by Whois?

- a. **ICANN**
- b. ARIN
- c. APNIC
- d. DNS

## MCQ Chapter 01

- 1) Which is the first AI program?
- a) The Logical Brain
  - b) AlphaSense
  - c) The Jarvis
  - d) The Logic Theorist

**Ans: d) The Logical Theorist**

- 2) Who is regarded as “The Father of AI?”
- a) Allan Turin
  - b) John Mc Carthy
  - c) J. C. Shaw
  - d) Allen Newell

**Ans: b) John Mc Carthy**

- 3) Which among this, is an AI created by IBM partner with Fluid PVT. Used specially for ‘Data Analysis?’
- a) EVE AI
  - b) Watson
  - c) Siri
  - d) Novel AI

**Ans: b) Watson**

- 4) What is PROLOG and LISP?
- a) Examples of super AI
  - b) Languages of AI
  - c) Concepts of AI
  - d) Type of AI

**Ans: b) Languages of AI**



5) The given illustrative diagram is related to which topic?



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

**Ans: a) Machine Learning**

6) There are how many dimensions of AI?

- a) Four
- b) Three
- c) Two
- d) One

**Ans: b) Three**

7) The term “Strong” or “Super” AI comes under which ‘type’ of AI?

- a) Type-1
- b) Type-2
- c) None of the above
- d) All of the above

**Ans: a) Type-1**

8) These machines can use stored data for a limited time period only.

- a) Reactive Machine
- b) Self-Awareness
- c) Limited machine
- d) Theory of mind

**Ans: c) Limited machine**

9) “KBS” in AI stands for?

- a) Knowledge Based Scenario
- b) Knowledge Based System
- c) Knowledge Based Segments
- d) Knowing Best System

**Ans: b) Knowledge Based System**

10) There are how many 'AI Approaches?'

- a) One
- b) Two
- c) Three
- d) Four

**Ans: d) Four**

### **MCQ Chapter 03**

1. When was International Organization on Computer Evidence (IOCE) formed?

- a. 1980
- b. 1997
- c. 1995
- d. 1984

**Ans: c. 1995**

2. CART is referred as...

- a. Computer Art and Response Team
- b. Common Analysis and Response Team
- c. Computer Analysis and Reasoning Team
- d. Computer Analysis and Response Team

**Ans: d. Computer Analysis and Response Team**

3. How many Rules are there of Digital Forensics?

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

**Ans: b. 6**

4. Fill in the blanks.

Digital Forensics is a series of steps to \_\_\_\_\_ and \_\_\_\_\_ electronic data through \_\_\_\_\_ method.

- a. Solve, analyses, Intelligent
- b. Uncover, analyses, scientific
- c. Uncover, analyses, electronic
- d. Solve, analyses, electronic

**Ans: b. Uncover, analyses, scientific**

5. There are how many models of digital forensics?

- a. 4
- b. 5
- c. 6
- d. 8

**Ans: c. 6**

6. Which of the following is not a model of digital forensics?

- a. RMDFR
- b. DFI
- c. IDIP
- d. UMDFPM

**Ans: b. DFI**

7. Who proposed EEDIP?

- a. Gunsh
- b. Korn
- c. Stepenson
- d. Palmer

**Ans: c. Stepenson**

8. There are hoe many phases in RMDFR model of digital forensics?

- a. Four
- b. Six
- c. Eight
- d. Ten

**Ans: b. Six**

9. When was pc forensics began?

- a. 1980
- b. 1984
- c. 1995
- d. 1997

**Ans: a. 1980**

10. Who is the father of Computer Forensics?

- a. Anderson
- b. Palmer
- c. Ciardhuain
- d. Korn

**Ans: a. Anderson**

### **MCQ Chapter 04**

1. The digital evidence is used to establish the credible link between ...

- a. System, evidence and victim
- b. Attacker, victim, and crime scene
- c. Attacker, victim and case file
- d. Attacker, system and victim

**Ans: b. Attacker, victim and crime scene**

2. An original copy of the document is considered as...

- a. Best evidence
- b. Original evidence
- c. Superior evidence
- d. True evidence

**Ans: c. Superior evidence**

3. Best Evidence Rule states that...
- a. It states that multiple copies of electronic files may be a part of the “original” or equivalent to the “original.”
  - b. It states that copy of evidence may be considered as original evidence.
  - c. It states that the multiple copies of evidence may be part of the “original” or equivalent to the “original.”
  - d. It states that multiple copies of electronic files may be a part of the “original” or same as “original.”

**Ans: a. It states that multiple copies of electronic files may be a part of the “original” or equivalent to the “original.”**

4. According to Locard’s Exchange Principle, contact between two items will result in an \_\_\_\_\_.
- a. War
  - b. Love
  - c. Exchange
  - d. Failure

**Ans: c. Exchange**

5. Which of the following is used to portray data more specifically and is helpful in determining the background of digital evidence?
- a. Data
  - b. Metadata
  - c. Cookies
  - d. History

**Ans: b. Metadata**

6. Testimonial is the major type of Evidence.
- a. True
  - b. False
  - c. None
  - d. N/A

**Ans: a. True**

7. When collecting evidence, you should always try to proceed from
- a. Least volatile to most volatile evidence
  - b. Most volatile to least volatile evidence
  - c. All evidence at same priority
  - d. Least then medium then most volatile evidence

**Ans: b. most volatile to least volatile evidence**

8. You must have both \_\_\_\_ and \_\_\_\_ to validate your evidence.
- a. Proof and victim
  - b. Power and skill
  - c. Power and proof
  - d. Proof and skill

**Ans: b. power and skill**

9. There are how many major types of evidence?
- a. Two
  - b. Four
  - c. Six
  - d. Seven

**Ans: c. six**

10. Physical evidence is also called as.
- a. Illustrative evidence
  - b. Explainable evidence
  - c. Substantial evidence
  - d. Real evidence

**Ans: c. substantial evidence**

## MCQ Chapter 05

1. Select the most appropriate definition of Ethical hacking.
  - a. Ethical hacking is the science of testing computer and network for security vulnerabilities and plugging the hole before the viruses get chance to exploit them.
  - b. Ethical hacking is the art of hacking computer and network for security vulnerabilities and plugging the hole before the viruses get chance to exploit them.
  - c. Ethical hacking is the science of testing computer and network for security vulnerabilities and plugging the hole before the unauthorized peoples get a chance to exploit them.
  - d. Ethical hacking is the art of testing computer and network for security vulnerabilities and plugging the hole before the viruses get chance to handle them.

**Ans: c. Ethical hacking is the science of testing computer and network for security vulnerabilities and plugging the hole before the unauthorized peoples get a chance to exploit them.**

2. A hacker who gains access to system with a view to fix the identified weaknesses is known as
  - a. White hat hackers
  - b. Grey hath hackers
  - c. Red hat hackers
  - d. Hacktivist

**Ans: a. white hat hackers**

3. Complete the sentence below

To catch a thief, think like a \_\_\_\_\_.

- a. Police
- b. Victim
- c. Thief
- d. Hacker

**Ans: c. Thief**

4. SATAN stands for\_
  - a. Security Advanced Tool for Analysis Networks
  - b. Security Admin Tool for Analysis Networks
  - c. Security Administrator Tool for Analysis Networks
  - d. Security Administrator Tool for Analysing Network

**Ans: c. Security Administrator for Analysis Networks**

5. Which type of hackers are invited by the software vendors to find the security flaws in their system?
- a. White hat hackers
  - b. Black hat hackers
  - c. Grey hat hackers
  - d. Blue hat hackers

**Ans: d. Blue hat hackers**

6. IRC stands for
- a. Internet Rules Chat
  - b. Internet Relay Chat
  - c. Internet Ready Chat
  - d. Internet Readable chat

**Ans: b. Internet Relay chat**

7. A non-skilled person who gains access to computer system using already made tools are known as?
- a. Grey hat hackers
  - b. Hacktivist
  - c. Script kiddies
  - d. Phreakers

**Ans: c. Script kiddies**

8. Identifying weakness in computer system or network to exploit its weaknesses to gain access is known as
- a. Cracking
  - b. Cybersecurity
  - c. Hacking
  - d. Threatening

**Ans: c. Hacking**

9. Exploration of a phone network without authorization is known as
- a. Scripting
  - b. Phreaking
  - c. Phone hacking
  - d. Call tracing

**Ans: b. Phreaking**



10. Social engineering the \_\_\_\_ of exploiting the human elements to gain access to unauthorized resources.
- a. Art
  - b. Science
  - c. Hacking
  - d. Skill

**Ans: a. Art**

### **MCQ Chapter 06**

1. Which of the following is not a network testing and port scanning tool?
- a. Nmap
  - b. SuperScan
  - c. John the ripper
  - d. NetCat

**Ans: c. John the Rippers**

2. Select the most appropriate option for the below two statements.

- I. A Dos attack can take down your internet connection
- II. A Dos attack can take down your entire system

- a. Both I and II are true
- b. I is true II is false
- c. I is false II is True
- d. Both I and II are false

**Ans: a. Both I and II are true**

3. SNMP stands for
- a. Simple Network Message Protocol
  - b. Simple New Message Protocol
  - c. Simple Network Management Protocol
  - d. Simple Network Managing Protocol

**Ans: c. Simple Network Management Protocol**

4. Which protocol does hackers use to make their system seems as your system or another allowed host on your network?
- a. SNMP protocol
  - b. TCP protocol
  - c. ARP protocol
  - d. ICMP protocol

**Ans: c. ARP protocol**

5. Letter bomb is also known as
- a. Official bomb
  - b. Hacking bomb
  - c. Mail bomb
  - d. E-mail bomb

**Ans: d. Email Bomb**

6. Which attack allows the attacker to execute the scripts on the victim's browser?
- a. SSL attack
  - b. Cookie attack
  - c. Banner grabbing
  - d. XSS attack

**Ans: d. XSS attack**

7. ACL stands for.
- a. Application Control Language
  - b. Application Control list
  - c. Access control List
  - d. Access Command List

**Ans: c. Access Control List**

8. As an ethical hacker, you should scan all \_\_\_\_\_ UDP and TCP port on each network host that's found by your scanner.
- a. 65535
  - b. 65353
  - c. 65333
  - d. 65555

**Ans: a. 65535**

9. Which of the following are the foundation of all the technical security issues in your information systems?
- a. Network Infrastructure vulnerabilities
  - b. Information vulnerabilities
  - c. System Infrastructure vulnerabilities
  - d. Network Information vulnerabilities

**Ans: a. Network infrastructure vulnerabilities**

10. Which attack is an HTTP attack which allows attackers to access restricted directories and execute commands outside the web servers root directory?
- a. XSS attack
  - b. Path Traversal attack
  - c. MITM attack
  - d. SQL Injection attack

**Ans: b. Path traversal Attack**

1What allows digital devices to interconnect and transmit data?

- a. a sensor
- b. a global positioning sensor
- c. a smart phone
- d. a network**

**2. Which command is used to test network connectivity and provide a response to each packet received by the remote host?**

- a. test
- b. tracer
- c. ping**
- d. connect

**3. What type of device could allow a refrigerator to place a replacement order for an item contained within it?**

- a. digital network
- b. generator
- c. smart phone
- d. sensor**

**4. True or False?**

Once connected to the home gateway, smart devices can be controlled from a smartphone, tablet, or PC.

**a.true**

b.false

**5. What information is conveyed by the SSID that is configured on an IoT device?**

a.the registration server

b.the default gateway

**c.the wireless network**

d.the home gateway

**6. What is comprised of millions of smart devices and sensors connected to the internet?**

a.the fog

**b.the internet of things**

c.the data center

d.the cloud

**7. Which tool allows a user to simulate real networks?**

a.artificial intelligence

**b.Packet Tracer**

c.internet

d.PAN

**8. True or False?**

The Internet of Things will connect inanimate objects to the network with intelligent sensors.

**a.true**

b.false

**9. Which type of network is used to connect a company located in one area of a city to another location in a city far away?**

- a.LAN
- b.PAN
- c.MAN
- d.WAN**

**10. Which type of computing is located at the edge of a business or corporate network and that allows data from sensors to be preprocessed?**

- a.internet
- b.fog**
- c.wireless
- d.WAN

1. Artificial Intelligence system developed by Terry A. Winograd to permit an interactive dialogue about a domain he called blocks-world.

- SIMD
- STUDENT
- SHRDLU
- BACON

**And:- SHRDLU**

2. What is Artificial intelligence?

- Programming with your own intelligence
- Putting your intelligence into Computer
- Making a Machine intelligent
- Playing a Game

**And:- Making a Machine intelligent**

3. DARPA, the agency that has funded a great deal of American Artificial Intelligence research, is part of the Department of

- Education
- Defense
- Energy
- Justice

**And:- Defense.**

4. Who is the “father” of artificial intelligence?

- John McCarthy
- Fisher Ada
- Allen Newell
- Alan Turning

**And:- Fisher Ada .**

5. KEE is a product of

- IntelliCorpn
- Teknowledge
- Texas Instruments
- Tech knowledge

**Ans:- IntelliCorpn .**

6. Default reasoning is another type of

- Analogical reasoning
- Bitonic reasoning
- Non-monotonic reasoning
- Monotonic reas

**Ans:- Non-monotonic reasoning.**

## 7. Weak AI is

- a set of computer programs that produce output that would be considered to reflect intelligence if it were generated by humans.
- the study of mental faculties through the use of mental models implemented on a computer.
- the embodiment of human intellectual capabilities within a computer.
- All of the above

**Ans:- Weak AI is the study of mental faculties through the use of mental models implemented on a computer.**

8. If a robot can alter its own trajectory in response to external conditions, it is considered to be:

- mobile
- open loop
- intelligent
- non-servo

**Ans:- intelligent .**

9. One of the leading American robotics centers is the Robotics Institute located at

RAND

MIT

CMU

SRI

**And:- CMU**

10. What is the name of the computer program that contains the distilled knowledge of an expert?

- Management information System
- Expert system
- Data base management system
- Artificial intelligence

**Ans:- expert system.**

11. In LISP, the function evaluates both <variable> and <object> is -

- setq
- add
- set
- eva

**Ans:-setq**

12. What is Artificial intelligence?

- Making a Machine intelligent
- Putting your intelligence into Computer
- Programming with your own intelligence
- putting more memory into Computer

**Ans:- Making a Machine intelligent.**

13. Which is not the commonly used programming language for AI?

- PROLOG
- LISP
- Perl
- Java script

**And:- Perl**



14. Which is not a property of representation of knowledge?

- Inferential Adequacy
- Representational Adequacy
- Representational Verification
- Inferential Efficiency

**Ans:- Representational Verification .**

15. A Hybrid Bayesian network contains

- Both discrete and continuous variables
- Only Discontinuous variable
- Both Discrete and Discontinuous variable
- Continuous variable only.

**And:- Both discrete and continuous variables**

### **3. Basics of Digital Forensic**

1. When cases go to trial, you as a forensics examiner can play one of \_\_\_\_ roles.

- a. 2      c. 4
- b. 3      d. 5

**Ans:- 2**

2. When you give \_\_\_\_ testimony, you present this evidence and explain what it is and how it was obtained.

- a. technical/scientific.    c. lay witness
- b. expert                      d. deposition

**And:- technical/scientific.**

3. Validate your tools and verify your evidence with \_\_\_\_ to ensure its integrity

- a. hashing algorithms    c. steganography
- b. watermarks              d. digital certificates

**And:- hashing algorithms**

4. For forensics specialists, keeping the \_\_\_\_ updated and complete is crucial to supporting your role as an expert and showing that you're constantly enhancing your skills through training, teaching, and experience.

- a. testimony    c. examination plan
- b. CV            d. deposition

**Ans:- CV**

5. If your CV is more than \_\_\_\_ months old, you probably need to update it to reflect new cases and additional training.

- a. 2      c. 4
- b. 3      d. 5

**Ans:- 3**

6. \_\_\_ is a written list of objections to certain testimony or exhibits.

- a. Defendant      c. Plaintiff
- b. Empanelling the jury      d. Motion in limine

**Ans:- Motion in limine**

7. Regarding a trial, the term \_\_\_\_ means rejecting potential jurors.

- a. voir dire      c. strikes
- b. rebuttal      d. venireman

**Ans:- strikes**

8. \_\_\_\_ from both plaintiff and defense is an optional phase of the trial. Generally, it's allowed to cover an issue raised during cross-examination

- a. Rebuttal      c. Closing arguments
- b. Plaintiff      d. Opening statements

**Ans:- Rebuttal**

9. If a microphone is present during your testimony, place it \_\_\_\_ to eight inches from you.

- a. 3      c. 5
- b. 4      d. 6

**Ans:- 6**

10. Jurors typically average just over \_\_\_\_ years of education and an eighth-grade reading level. a. 9      c. 11

- b. 10      d. 12

**Ans:- 12**

#### ***4. Digital Evidences***

1. A valid definition of digital evidence is:

- a. Data stored or transmitted using a computer
- b. Information of probative value
- c. Digital data of probative value**
- d. Any digital evidence on a computer

2. What are the three general categories of computer systems that can contain digital evidence?

- a. Desktop, laptop, server
- b. Personal computer, Internet, mobile telephone
- c. Hardware, software, networks
- d. Open computer systems, communication systems, embedded systems**

3. In terms of digital evidence, a hard drive is an example of:

- a. Open computer systems**
- b. Communication systems
- c. Embedded computer systems
- d. None of the above

4. In terms of digital evidence, a mobile telephone is an example of:

- a. Open computer systems
- b. Communication systems
- c. Embedded computer systems**
- d. None of the above

5. In terms of digital evidence, a Smart Card is an example of:

- a. Open computer systems
- b. Communication systems
- c. Embedded computer systems**
- d. None of the above

6. In terms of digital evidence, the Internet is an example of:

- a. Open computer systems
- b. Communication systems**
- c. Embedded computer systems
- d. None of the above

7. Computers can be involved in which of the following types of crime?

- a. Homicide and sexual assault
- b. Computer intrusions and intellectual property theft
- c. Civil disputes
- d. All of the above**

8. A logon record tells us that, at a specific time:

- a. An unknown person logged into the system using the account
- b. The owner of a specific account logged into the system
- c. The account was used to log into the system**
- d. None of the above

9. Cybertrails are advantageous because:

- a. They are not connected to the physical world.
- b. Nobody can be harmed by crime on the Internet.
- c. They are easy to follow.

**d. Offenders who are unaware of them leave behind more clues than they otherwise would have.**

10. Private networks can be a richer source of evidence than the Internet because:

- a. They retain data for longer periods of time.
- b. Owners of private networks are more cooperative with law enforcement.
- c. Private networks contain a higher concentration of digital Evidences**
- d. None of the above.

### ***5. Basic of Hacking***

1. What is the attack called “evil twin”?

- **Rogue access point**
- ARP poisoning
- Session hijacking
- MAC spoofing

2. What are the forms of password cracking techniques?

- AttackSyllable
- AttackBrute Forcing
- AttacksHybrid
- **All of the above**

3. what is the primary goal of an Ethical Hacker ?

- Avoiding detection
- Testing security controls
- **Resolving security vulnerabilities**
- Determining return on investment for security measures

4. What is the first phase of hacking?

- Maintaining access
- Gaining access
- Reconnaissance
- Scanning

5. Which type of hacker represents the highest risk to your network?

- Black-hat hackers
- Grey-hat hackers
- Script kiddies
- **Disgruntled employees**

6. Hacking for a cause is called .....

- **Hactivism**
- Black-hat hacking
- Active hacking
- Activism

7. When a hacker attempts to attack a host via the Internet it is known as what type of attack?

- Local access
- **Remote attack**
- Internal attack
- Physical access

8. Which are the four regional Internet registries?

- APNIC, MOSTNIC, ARIN, RIPE NCC
- APNIC, PICNIC, NANIC, ARIN
- APNIC, PICNIC, NANIC, RIPE NCC
- **APNIC, LACNIC, ARIN, RIPE NCC**

9. What port number does HTTPS use?

- 53
- **443**
- 80
- 21

10. Banner grabbing is an example of what?

- Footprinting
- Active operating system fingerprinting
- **Passive operating system fingerprinting**
- Application analysis



## ***6. Types of Hacking***

**1** . Which of the following statements best describes a white-hat hacker?

**A. Security professional**

B. Former black hat

C. Former grey hat

D. Malicious hacker

2. A security audit performed on the internal network of an organization by the network administration is also known as \_\_\_\_\_.

A. Grey-box testing

B. Black-box testing

**C. White-box testing**

D. Active testing

E. Passive testing

3. What is the first phase of hacking?

A. Attack

B. Maintaining access

C. Gaining access

**D. Reconnaissance**

E. Scanning

4. What type of ethical hack tests access to the physical infrastructure?

A. Internal network

B. Remote network

C. External network

**D. Physical access**

5. The security, functionality, and ease of use triangle illustrates which concept?

A. As security increases, functionality and ease of use increase.

**B. As security decreases, functionality and ease of use increase.**

C. As security decreases, functionality and ease of use decrease.

D. Security does not affect functionality and ease of use.

6. Which type of hacker represents the highest risk to your network?

**A. Disgruntled employees**

B. Black-hat hackers

C. Grey-hat hackers

D. Script kiddies

7. What are the three phases of a security evaluation plan? (Choose three answers.)

A. Conduct Security Evaluation

B. Preparation

C. Conclusion

D. Final

E. Reconnaissance

F. Design Security

G. Vulnerability Assessment

Answer :- A, B, C.

8. Hacking for a cause is called \_\_\_\_\_.

A. Active hacking

**B. Hacktivism**

C. Activism

D. Black-hat hacking

9. Which federal law is most commonly used to prosecute hackers?

A. Title 12

**B. Title 18**

C. Title 20

D. Title 2

10. When a hacker attempts to attack a host via the Internet it is known as what type of attack?

**A. Remote attack**

B. Physical access

C. Local access

D. Internal attack

### **MCQ'S**

#### **CHAPTER 3: Basics of Digital Forensics**

1. IOCE is .....?

- a. Organization on computer evidence
- b. Organization on communication evidence
- c. Organization on country education
- d. Organization on crime evidence

Ans : a)Organization on computer evidence

2. Digital forensic applied both ..... ?

- a. Analysis and response action
- b. Computer crime and civil action
- c. Criminal and civil action
- d. Regional and forensic action

Ans : c) criminal and civil action

3. How many rules are there in Digital Forensics :

- a. 5
- b. 2
- c. 7
- d. 6

Ans : d) 6

4. Compliance with the law and .....

- a. Professional norms.
- b. Collection
- c. Prevention
- d. Examination

Ans : a) Professional norms

5. What is the full form of ADFM

- a. Abstract defining forensic model
- b. Abstract digital forensic model
- c. Abstract digital forensic media
- d. Analysis digital forensic model

Ans : b) Abstract digital forensic model

6. The whole process is triggered by .....

- a. Investigator
- b. Society
- c. Digital forensic
- d. Criminal activity

Ans : d) Criminal activity

7. Digital forensic is all of them except:

- a. Extraction of computer data
- b. Preservation of computer data
- c. Interpretation of computer data
- d. Manipulation of computer data

Ans: b) Preservation of computer data

8. IDIP stand for

- a. Integrated digital investigation process
- b. Integrated data investigation process
- c. Integrated digital investigator process
- d. None of the above

Ans : a) Integrated digital investigation process

9. Who proposed Road map model ?

- a. G.Gunsh
- b. S.Ciardhuain
- c. J.Korn
- d. G.Palmar

Ans : d) G.Palmar

10. Field of PC forensics began in which year ?

- a. 1975
- b. 1944
- c. 1971
- d. 1980

Ans : d) 1980

### **MCQ'S**

#### **CHAPTER 4: Digital Evidences**

1. Which of the following is not a digital device ?

- a. Computer
- b. Phone
- c. Guitar
- d. Internet

Ans : c) Guitar

2. Rule of evidence is called as .....

- a. Digital Evidence
- b. Law of Evidence
- c. Hidden Evidence
- d. Electronic Evidence

Ans : b) Law Of Evidence

3. BPO stand for .....

- a. Business profile outsourcing
- b. Business profile outcome
- c. Business process outsourcing
- d. Business process outcome

Ans : c) Businesses process outsourcing

4. The digital evidence are used to establish a credible link between.....
- a. Attacker and victim and the crime scene
  - b. Attacker and the crime scene
  - c. Victim and the crime scene
  - d. Attacker and information

Ans : a) Attacker and victim and the crime scene

5. Which of the following is not a type of volatile evidence?
- a. Routing Table
  - b. Main memory
  - c. Log files
  - d. Cached Data

Ans : c) Log files

5. Will volatile evidences last forever
- a. No
  - b. Not Sure
  - c. Yes
  - d. None of the above

Ans : a) No

6. Investigation means :
- a. Collection of information
  - b. A procedure to find the Digital Evidence
  - c. Searching over internet
  - d. Hacking computer systems

Ans : b) A procedure to find the Digital Evidence

7. The evidence or proof that can be obtained from the electronic source is called the .....
- a. Digital evidence
  - b. Demonstrative evidence
  - c. Explainable evidence
  - d. Substantial evidence

Ans : a) Digital evidence

8. Which one is not a 103 rule of evidence
- a. Maintaining a claim of error
  - b. Aim of an offer of proof
  - c. Plain error taken
  - d. Destroying data

Ans : d) Destroying data

9. Digital evidence must follow the requirements of the .....
- a. Ideal evidence
  - b. Best evidence
  - c. Exchange evidence
  - d. All of the mentioned

Ans : b) Best evidence

## MCQ'S

### **CHAPTER 5: Basics of Hacking**

1. What is hacking ?
- a. Identifying weakness in computer system or networks
  - b. Refers to act of locating vulnerabilities
  - c. A security to your personal data
  - d. Protocols of corrupting data

Ans : a) Identifying weakness in computer system or networks

2. Ethical Hacking is known as .....
- a. White Hat hacking
  - b. Black Hat hacking
  - c. Encrypting
  - d. None of these

Ans : a) white Hat hacking

3. How many steps are there the legality of ethical hacking ?
- a. 5
  - b. 2
  - c. 7
  - d. 6

Ans : a) 5

4. Tools used by ethical hackers.....
- a. Scanner
  - b. Decoder
  - c. Proxy
  - d. All of these

Ans : a) scanner



5. Hackers are also called as
- a. Good Guys
  - b. Bad Guys
  - c. Both of the above
  - d. None of the above

Ans : b) Bad Guys

6. Vulnerability scanning in Ethical hacking finds.....
- a. Strengths
  - b. Weakness
  - c. A&B
  - d. None of these

Ans : b) weakness

7. What is the required education to be an ethical hacker ?
- a. Diploma holder
  - b. 10+2 passed
  - c. Bachelor's degree in the related field
  - d. Nothing needed

Ans : c) Bachelor's degree in related field

8. Ethical hacking will allow to .....all the massive security breaches.
- a. Reject
  - b. Measure
  - c. Remove
  - d. None of these

Ans : d) None of these

9. Security tools that are widely used are :
- a. Nmap
  - b. WebInspect
  - c. Network Strumbler
  - d. All of the above

Ans : d) All of the above

10. TCP stand for.....
- a. Transmission Control Protocol
  - b. Transfer Control Protocol
  - c. Travel Control Protocol
  - d. Tracking Control Protocol

Ans : a) Transmission Control Protocol

## **MCQ'S**

### **CHAPTER 6: Types of Hacking**

1. SNMP stand for.....
  - a. Simple network messaging protocol
  - b. Simple network Mailing protocol
  - c. Simple network management protocol
  - d. Simple network Master protocol

Ans : c) Simple network management protocol

2. What is the full form of NIV Foundation?
  - a. Network Infrastructure Violation
  - b. Network Issue Vulnerabilities
  - c. Network Infrastructure Vulnerabilities
  - d. Network Information Vulnerabilities

Ans : c) Network Infrastructure Vulnerabilities

3. Banner grabbing is often used for.....
  - a. White hat hacking
  - b. Black hat hacking
  - c. Gray hat hacking
  - d. Script kiddies

Ans : a) white hat hacking

4. What is the full form of UDP
  - a. Union Development Program
  - b. User Data Program
  - c. User Datagram Protocol
  - d. Unified Datagram Provider

Ans : c) User Datagram Protocol

5. IMAP stand for.....
  - a. Internet message access protocol
  - b. Internet mailing access protocol
  - c. Information access protocol
  - d. None of these

Ans : a) Internet message access protocol

6. What is full form of MAC
- a. Model Access Communication
  - b. Media Access Control
  - c. Multimedia Access Control
  - d. Modern Access Control

Ans : b) Media Access Control

7. Which IEEE standards specify the technologies for wireless LANs 802.11
- a. IEEE 802.11
  - b. IEEE 802.10
  - c. IEEE 279.6
  - d. IEEE 275.4

Ans : a) 802.11

8. An attackers can create an .....attack by sending hundreds or thousand of e-mail with very large attachment.
- a. Connection Attack
  - b. Auto responder Attack
  - c. Attachment overloading Attack
  - d. All of the above

Ans : c) Attachment overloading attack

9. Port no.(6346,6347) Gnutella service having which protocols .....
- a. TCP
  - b. UDP
  - c. TCP, UDP
  - d. NONE

Ans : c) TCP,UDP

10. What is the full form of DMZ
- a. Demilitarized Zone
  - b. Demonetized Zone
  - c. Demand Zone
  - d. Demoralized Zone

Ans : a) Demilitarized Zone

## MCQ'S

### **CHAPTER 1: Artificial Intelligence**

1) Which is the first AI program?

- a) The Logical Brain
- b) AlphaSense
- c) The Jarvis
- d) The Logic Theorist

Ans: d) The Logical Theorist

2) Who is regarded as “The Father of AI?”

- a) Allan Turin
- b) John Mc Carthy
- c) J. C. Shaw
- d) Allen Newell

Ans: b) John Mc Carthy

3) Which among this, is an AI created by IBM partner with Fluid PVT. Used specially for ‘Data Analysis?’

- a) EVE AI
- b) Watson
- c) Siri
- d) Novel AI

Ans: b)

Watson

4) What is PROLOG and LISP?

- a) Examples of super AI
- b) Languages of AI
- c) Concepts of AI
- d) Type of AI

Ans: b) Languages of AI

5) The given illustrative diagram is related to which topic?

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

Ans: a) Machine Learning



6) There are how many dimensions of AI?

- a) Four
- b) Three
- c) Two
- d) One

Ans: b) Three

7) The term “Strong” or “Super” AI comes under which ‘type’ of AI?

- a) Type-1
- b) Type-2
- c) None of the above
- d) All of the above

Ans: a) Type-1

8) These machines can use stored data for a limited time period only.

- a) Reactive Machine
- b) Self-Awareness
- c) Limited machine
- d) Theory of mind

Ans: c)

Limited machine

9) “KBS” in AI stands for?

- a) Knowledge Based Scenario
- b) Knowledge Based System
- c) Knowledge Based Segments
- d) Knowing Best System

Ans: b) Knowledge Based System

10) There are how many ‘AI Approaches?’

- a) One
- b) Two
- c) Three
- d) Four

Ans: d) Four

## **CHAPTER 2: Internet of Things**

1) Raspbian is:

- a) Assembler
- b) Language
- c) Compiler
- d) OS

Ans:- d. OS

2) Which one out of these is not LPWAN technologies:

- a) SigFox
- b) WiFi
- c) NB-IoT
- d) LoRa

Ans:- b. WiFi

3) Computer programs that mimic the way the human brain processes information is called as:-

- a) Machine learning
- b) Deep learning
- c) Neural networks
- d) None of the above

Ans:- c. Neural  
networks

4) \_\_\_\_\_ is a branch of Science which deals with the helping machine find solutions to complex problems in a more human like fashion

- a. Artificial Intelligence
- b. Internet Of Things
- c. Embedded system
- d. cyber Security

Ans:- a. Artificial Intelligence

5) What does LTE stands for:-

- a) Long Terms Errors
- b) Long Term Evolution
- c) Lengthy terminal Estimation
- d) Long term Estimates

Ans:- b. Long Term Evolution

6) Which transport layer protocols is used by DHCP:-

- a. RSVP
- b. TCP
- c. DCCP
- d. UDP

Ans:- d. UDP

7) Which one out of these is not a data link layer technology:-

- a) Bluetooth
- b) UART
- c) WiFi
- d) HTTP

Ans:- d. HTTP

8) IoT stands for:-

- a) Internet of Technology
- b) Intranet of Things
- c) Internet of Things
- d) Information of Things

Ans:- c. Internet of  
Things

9) WSN stands for:-

- a) Wide Sensor Network
- b) Wireless Sensor Network
- c) Wired Sensor Network
- d) None of these

Ans:- b. Wireless Sensor Network

10) Which is not the feature of IoT:-

- a. Connectivity
- b. Self-configuring
- c. Endpoint Management
- d. Artificial Intelligence

Ans:- b. Self-configuring



## **CHAPTER 3: Basics of Digital Forensics**

11. Which of the following sciences pay vital role in criminal justice systems ?

- a. Digital Forensics
- b. Forensic Science
- c. PC Forensics
- d. INTERPOL Forensic

Ans : b) Forensic Science

12. The full form of DFI is :

- e. Digital Forensic Investigation
- f. Digitalized Forensic Investigation
- g. Digital Foreign Investment
- h. Direct Forensic Investigation

Ans : a) Digital Forensic Science

13. How many rules are there in Digital Forensics :

- a. 5
- b. 2
- c. 7
- d. 6

Ans : d) 6

14. Which of the following is not involved in DFI's road map :

- a. Identification
- b. Collection
- c. Prevention
- d. Examination

Ans : c) Prevention

15. What is the full form of EEDIP

- a. End to End Digital Investigation Program
- b. End to End Digital Investigation Process
- c. End to End Digital Forensic Investigation
- d. End to End Digital Forensic Investment

Ans : b) End to End Digital Investigation Process

16. Ethical Issues in Digital Forensic means :

- a. Set of moral principals that regulate the use of computers
- b. Related to ethical hacking
- c. Honesty towards investigation
- d. Compliance with law

Ans : a) Set of moral principals that regulate the use of computers

17. What do primary investigator consider from the original source :

- a. Summarize and hold the data
- b. Whether to analyze more data or to extract more data
- c. Examine the data and store it
- d. Compress the data

Ans : b) Whether to analyze more data or to extract more data

18. Who proposed the UML Modelling of Digital Forensic Process Model

- a. Kohn, Eloff and Oliver
- b. Response Team
- c. Only (a)
- d. None of the above

Ans : a) Kohn, Eloff and Oliver

19. From what should the digital data must be protected ?

- a. Copied
- b. Deleted
- c. Modified
- d. Destroyed

Ans : c) Modified

20. Field of PC forensics began in which year ?

- a. 1975
- b. 1944
- c. 1971
- d. 1980

Ans : d) 1980

## **MCQ'S**

### **CHAPTER 4: Digital Evidences**

10. Which of the following is not a digital device ?

- a. Computer
- b. Phone
- c. Guitar
- d. Internet

Ans : c) Guitar

11. Digital evidences are also called as :

- a. Digital proof
- b. Evidence
- c. Hidden Truth
- d. Electronic Evidence

Ans : d) Electronic Evidence

12. Which of the following is not the form of digital evidence:

- a. Text messages
- b. Emails
- c. Pictures
- d. Paper

Ans : d) Paper

13. According to Edmond Locard, there will be interchange if :

- a. Two items interchange with each other
- b. Two items make contact
- c. No interaction needed
- d. No devices needed

Ans : b) Two items make contact

14. What is digital evidence according to Cohen ?

- a. Baggage of proofs
- b. Collection of evidences
- c. Bag of bits
- d. Backpack of Bytes

Ans : c) Bag of bits

15. Will volatile evidences last forever

- a. No
- b. Not Sure
- c. Yes
- d. None of the above

Ans : a) No

16. Investigation means :

- a. Collection of information
- b. A procedure to find the Digital Evidence
- c. Searching over internet
- d. Hacking computer systems

Ans : b) A procedure to find the Digital Evidence

17. To whom is the IP addresses were traced ?

- a. Internet Service Provider
- b. Cyber Crime Office
- c. Only (a)
- d. None of the above

Ans : a) Internet Service Provider

18. Which one is not a 103 rule of evidence

- a. Maintaining a claim of error
- b. Aim of an offer of proof
- c. Plain error taken
- d. Destroying data

Ans : d) Destroying data

19. Which one of the following locates data on network devices :

- a. ARP Cache
- b. Kernel Statistics
- c. Routing Table
- d. Memory

Ans : c) Routing Table

## MCQ'S

### **CHAPTER 5: Basics of Hacking**

11. What is hacking ?

- a. Identifying weakness in computer system or networks
- b. Refers to act of locating vulnerabilities
- c. A security to your personal data
- d. Protocols of corrupting data

Ans : a) Identifying weakness in computer system or networks

12. Malicious users are also called as :

- a. External attackers
- b. Trusted users
- c. hacker
- d. Internal attackers

Ans : d) Internal attackers

13. How many steps are there the legality of ethical hacking ?

- a. 5
- b. 2
- c. 7
- d. 6

Ans : a) 5

14. What is PayPal ?

- a. Pay through Pal
- b. NetBanking
- c. Payment Gateway
- d. Information app

Ans : c) Payment Gateway

15. Hackers are also called as

- a. Good Guys
- b. Bad Guys
- c. Both of the above
- d. None of the above

Ans : b) Bad Guys

16. Ethical hackers are

- a. Trained hackers
- b. Related to ethical hacking
- c. Bad guys
- d. Good guys

Ans : a) Trained hackers

17. What is the required education to be an ethical hacker ?

- a. Diploma holder
- b. 10+2 passed
- c. Bachelor's degree in the related field
- d. Nothing needed

Ans : c) Bachelor's degree in related field

18. Which is not an Ethical Hacking related career

- a. Back-End Developer
- b. Software Tester
- c. Software Developer
- d. Computer Networking Specialist

Ans : a) Software Tester

19. Security tools that are widely used are :

- a. Nmap
- b. WebInspect
- c. Network Strumbler
- d. All of the above

Ans : d) All of the above

20. What is the full form of TCP :

- a. Transmission Control Protocol
- b. Transfer Control Protocol
- c. Travel Control Protocol
- d. Tracking Control Protocol

Ans : a) Transmission Control Protocol

## **MCQ'S**

### **CHAPTER 6: Types of Hacking**

11. Network Testing and port scanning tools are :

- a. Sam Spade
- b. SuperScan
- c. NetScan
- d. All of the above

Ans : d) All of the above

12. What is the full form of NIV Foundation?

- a. Network Infrastructure Violation
- b. Network Issue Vulnerabilities
- c. Network Infrastructure Vulnerabilities
- d. Network Information Vulnerabilities

Ans : c) Network Infrastructure Vulnerabilities

13. Number of Successful NetBIOS queries :

- a. 5
- b. 13
- c. 12
- d. 17

Ans : b) 13

14. What is the full form of UDP

- a. Union Development Program
- b. User Data Program
- c. User Datagram Protocol
- d. Unified Datagram Provider

Ans : c) User Datagram Protocol

15. What is Banner Grabbing ?

- a. Act of capturing the information by banners
- b. Grabbing Information
- c. Information Sharing
- d. Sharing Information

Ans : a) Act of capturing the information by banners

16. What is full form of MAC

- a. Model Access Communication
- b. Media Access Control
- c. Multimedia Access Control
- d. Modern Access Control

Ans : b) Media Access Control

17. Which IEEE standards specify the technologies for wireless LANs 802.11

- a. IEEE 802.11
- b. IEEE 802.10
- c. IEEE 279.6
- d. IEEE 275.4

Ans : a) 802.11

18. LINUX is an

- a. Application
- b. Software
- c. Toolkit
- d. Operating System

Ans : d) Operating System

19. Which of the following is an Email attack :

- a. Hacking
- b. Decrypting
- c. Bomb
- d. Banner

Ans : d) Banner

20. What is the full form of DMZ

- a. Demilitarized Zone
- b. Demonetized Zone
- c. Demand Zone
- d. Demoralized Zone

Ans : a) Demilitarized Zone



**MCQ's Question and Answers (the answers are highlighted in bold)**

**Q1.** When the Federal Bureau of investigation was create ?.

- A)1900      B)1980      C)19450      **D)1984**

**Q2.** What is The Full form of CART

- A)Computer Analysis and Response Team**      B) Cathode Analog Ray Tube  
C)Computer Accessories Repairing team      D)None

**Q3** When IOCE is Formed

- A)1992      B)1980      C)19490      **D)1995**

**Q4** Full Form Of IOCE

- A)International Organization on Computer Evidence**      B)Internet of Computer Education  
C) Internet of Computer Evidence      D)None

**Q5** When was the first FBI Regional Computer Forensic laboratory was Recognize ?.

- A)1992      B)1980      C)19490      **D)2000**

**Q6** How Many Rules in Digital forensic

- A)12      B)19      C)10      **D)6**

**Q7** What is the Long form of DFI

- A)Digital Forensic Investigation**      B)Digital Fraud Industry  
C)Defining Form In      D)None

**Q8** How Many Phases in **RDMDFR**

- A)12      B)19      C)10      **D)6**

**Q9** Investigator should satisfy the following point:

- A)Contribute to the society and human being      B)Avoid harm to others  
C)honest and trustworthy      **D)All Of the Above**

**Q10** Who proposed Road Map Model

- A)G. Gunsh      B)S. Ciardhuain      C)J. Korn      **D)G. Palmar**

**Q11** Digital Evidence in the form of the:

A)Office File    B)E-mail Messages    C)Either A or B    **D)Both A and B**

**Q12** In Computer intrusions the attacker will be leave multiple traces of there presence in:

A)File System    B)Registry    C)System Logs    **D)All of the Above**

**Q13** What are the Form of Electronic Evidence:

A)Hard Drive    B)E-mail    C)Either A or B    **D)Both A and B**

**Q14** How Many Types of the Evidence

A)12    B)19    C)10    **D)6**

**Q15** What is the full form of **BPO**

**A)Business Process Outsourcing**

**Q16** The Digital evidence are used to established a credible link between.....

**A)Attacker and victim and the crime scene**    B)Attacker And information

C)Either A or B    D)Both A and B

**Q17** The evidence and proof that can be obtained from the electronic source is called the.....

**A)Digital Evidence**    B)Explainable evidence    C)Either A or B    D)Both A and B

**Q18** Which of the following is not type of volatile evidence:

A)Routing Tables    B) Main Memory    C)Log Files    **D) Cached Data**

**Q19** Digital Evidence must follow the requirement of the

A)Ideal Evidence Rule    B)Best Evidence Rule    C)Exchange Rule    **D)All of the mentioned**

**Q20** White hat Hacker is known as the

A)Cracker    **B)Ethical**    C)Grey Hat    D)Script Kiddies

**Q21** What is an grey hat hacker

A)Black Hat Hacker    B)White Hat Hacker    **C)Combination of White and black hat hackers**    D)None

**Q22** A Hacker who identifies and exploits weakness in telephones instead of computers is known as:

**A)Phreaker**    B)Hacktivist    C)Ethical hacker    D)Grey Hat hacker

**Q23** Long Form of the VPN

**A)Virtual Private Network**    B)Virtual Personal Network    C)Both    D)None

**Q24** Who are use their skill to identify security problem with computer network

A)Black Hat Hacker      **B)Ethical Hacker**      C)Grey Hat hacker      D)Script Kiddies

**Q25** To crack the password you need cracking tool such as:

A)LC4      B)John The Ripper      C)pwdump      **D)All of the above**

**Q26** NMAP known as:

**A)Network Mapper**      B)NetCat      C)SuperScan      D)NetScan

**Q27** What is the most valuable assets of an organization

**A)Information**

**Q28** What is the full form of SMTP

**A)Simple mail Transfer Protocol**

**Q29** What is the full form of DNS

**A)Domain Name System**      B)Simple mail Transfer Protocol

C)Internet Message Access Protocol      D) Network Mapper

**Q30** What is the full form of IMAP

**A)Internet Message Access Protocol**      B)Simple mail Transfer Protocol

C)Internet Message Access Protocol      D)None

**Q31** What is the full form of SNMP

**A)Simple Network Management Protocol**

**Q32** Which of the following used for the Network Testing and port scanning

A)NetCat      B)SuperScan      C)NetScan      **D)All of Above**

**Q33** The whole email server may be targeted for a complete interruption of services with these failure like

**A)Storage overload and bandwidth blocking**

**Q34** Which is the top most directory in the server file system

**A)Root Directory**

**Q35** Which list is used in the authorization process

**A)Access Control List**

**Q36** What is the latest version of UNIX

**A)LINUX**

**Q37** Which OS is widely used in the world

**A)Windows    B)LINUX    C)IOS    D)NONE**

**Q38** Name of network analyzer which support windows and unix OS

**A)Ethereal**

**Q39** You can grab banner by using

**A)Telnet    B)NetCat    C)Either A or B    D)Both A and B**

**Q40** An attacker can create an ..... attack by sending hundreds or thousands of emails with very large attachment

**A)Attachment Overloading Attack    B)Connection Attack    C)Auto Responder Attack**

**D)All of the Above**

**1. What is the first phase of hacking?**

- A. Attack
- B. Maintaining access
- C. Gaining access
- D. Reconnaissance**
- E. Scanning

**2. What type of ethical hack tests access to the physical infrastructure?**

- A. Internal network
- B. Remote network
- C. External network
- D. Physical access**

**3. Which type of hacker represents the highest risk to your network?**

- A. Disgruntled employees**
- B. Black-hat hackers
- C. Grey-hat hackers
- D. Script kiddies

**4. Hacking for a cause is called \_\_\_\_\_.**

- A. Active hacking
- B. Hacktivism**
- C. Activism
- D. Black-hat hacking

**5. When a hacker attempts to attack a host via the Internet it is known as what type of attack?**

- A. Remote attack**
- B. Physical access
- C. Local access
- D. Internal attack

**6. Which are the four regional Internet registries?**

- A. APNIC, PICNIC, NANIC, RIPE NCC
- B. APNIC, MOSTNIC, ARIN, RIPE NCC

- C. APNIC, PICNIC, NANIC, ARIN
- D. APNIC, LACNIC, ARIN, RIPE NCC**

**7.How does traceroute work?**

- A. It uses an ICMP destination-unreachable message to elicit the name of a router.
- B. It sends a specially crafted IP packet to a router to locate the number of hops from the sender to the destination network.
- C. It uses a protocol that will be rejected by the gateway to determine the location.
- D. It uses the TTL value in an ICMP message to determine the number of hops from the sender to the router.**

**8. Nslookup can be used to gather information regarding which of the following?**

- A. Host names and IP addresses**
- B. Whois information
- C. DNS server locations
- D. Name server types and operating systems

**9.What is it called when a hacker pretends to be a valid user on the system?**

- A. Impersonation**
- B. Third-person authorization
- C. Help desk
- D. Valid user

**10.What is the best reason to implement a security policy?**

- A. It increases security.
- B. It makes security harder to enforce.
- C. It removes the employee's responsibility to make judgments.**
- D. It decreases security.

## Chapter No 3 : Basics Of Digital Forensic

### 1. What is Digital Forensic?

- A. Process of using scientific knowledge in analysis and presentation of evidence in court
- B. The application of computer science and investigative procedures for a legal purpose involving the analysis of digital evidence after proper search authority, chain of custody, validation with mathematics, use of validated tools, repeatability, reporting, and possible expert presentation**
- C. A process where we develop and test hypotheses that answer questions about digital events
- D. Use of science or technology in the investigation and establishment of the facts or evidence in a court of law

### 2. Does database forensic include in Digital Forensic application

- A. True**
- B. False

### 3. Which of the following is NOT focus of digital forensic analysis?

- A. Authenticity
- B. Comparison
- C. Proving**
- D. Enhancement

### 4. Which of the following represents the step of scientific methodI- Develop hypothesis based on evidenceII- Calculate hash value of evidenceIII- Test the hypothesis to look for additional evidence IV-make an imaging of the original evidence

- A. All above
- B. I and III**
- C. II and IV
- D. II, III and IV

5. What is the Primary Objectives of Digital Forensic for Business and Industry

- A. **Availability of service**
- B. Continuity of operation
- C. Prosecution
- D. Security

6. Which of the following hold the highest value of evidence in the court?

- A. Documentary
- B. Demonstrative
- C. Testimonial
- D. **Real**

7. Which of the following is FALSE

- A. The digital forensic investigator must maintain absolute objectivity
- B. **It is the investigator's job to determine someone's guilt or innocence.**
- C. It is the investigator's responsibility to accurately report the relevant facts of a case.
- D. The investigator must maintain strict confidentiality, discussing the results of an investigation on only a "need to know" ba

8. \_\_\_\_ is a written list of objections to certain testimony or exhibits.

- a. Defendant
- b. Empanelling the jury
- c. Plaintiff
- d. **Motion in limine**



9. Attorneys can now submit documents electronically in many courts; the standard format in federal courts is \_\_\_\_.

- a. Microsoft Word (DOC)
- b. Portable Document Format (PDF)**
- c. Encapsulated Postscript (EPS)
- d. Postscript (PS)

10. A(n) \_\_\_\_ is a document that lets you know what questions to expect when you are testifying.

- a. written report
- b. affidavit
- c. examination plan**
- d. subpoena

## Chapter No 4 : Digital Evidences

1. A valid definition of digital evidence is:

- a. Data stored or transmitted using a computer
- b. Information of probative value
- c. Digital data of probative value**
- d. Any digital evidence on a computer

2. What are the three general categories of computer systems that can contain digital evidence?

- a. Desktop, laptop, server
- b. Personal computer, Internet, mobile telephone
- c. Hardware, software, networks
- d. Open computer systems, communication systems, embedded systems**

3. In terms of digital evidence, a hard drive is an example of:

- a. Open computer systems**
- b. Communication systems
- c. Embedded computer systems
- d. None of the above

4. In terms of digital evidence, a mobile telephone is an example of:

- a. Open computer systems
- b. Communication systems
- c. Embedded computer systems**
- d. None of the above

5. In terms of digital evidence, a Smart Card is an example of:

- a. Open computer systems
- b. Communication systems
- c. Embedded computer systems**
- d. None of the above

6. In terms of digital evidence, the Internet is an example of:

- a. Open computer systems
- b. Communication systems**
- c. Embedded computer systems
- d. None of the above

7. Computers can be involved in which of the following types of crime?

- a. Homicide and sexual assault
- b. Computer intrusions and intellectual property theft
- c. Civil disputes
- d. All of the above**

8. A logon record tells us that, at a specific time:

- a. An unknown person logged into the system using the account
- b. The owner of a specific account logged into the system
- c. The account was used to log into the system**
- d. None of the above

9. Cybertrails are advantageous because:

- a. They are not connected to the physical world.
- b. Nobody can be harmed by crime on the Internet.
- c. They are easy to follow.
- d. Offenders who are unaware of them leave behind more clues than they otherwise would have.**

10. Private networks can be a richer source of evidence than the Internet because:

- a. They retain data for longer periods of time.
- b. Owners of private networks are more cooperative with law enforcement.
- c. Private networks contain a higher concentration of digital evidence.**
- d. All of the above.

## Chapter No 5 : Basics of hacking

1. What is the ethics behind training how to hack a system?

- a) To think like hackers and know how to defend such attacks**
- b) To hack a system without the permission
- c) To hack a network that is vulnerable
- d) To corrupt software or service using malware

2. Performing a shoulder surfing in order to check other's password is \_\_\_\_\_ ethical practice.

- a) a good
- b) not so good
- c) very good social engineering practice
- d) a bad**

3. \_\_\_\_\_ has now evolved to be one of the most popular automated tools for unethical hacking.

- a) Automated apps
- b) Database software
- c) Malware**
- d) Worms

4. Leaking your company data to the outside network without prior permission of senior authority is a crime.

- a) True**
- b) False

5. \_\_\_\_\_ is the technique used in business organizations and firms to protect IT assets.

**a) Ethical hacking**

- b) Unethical hacking
- c) Fixing bugs
- d) Internal data-breach

6. The legal risks of ethical hacking include lawsuits due to \_\_\_\_\_ of personal data.

- a) stealing
- b) disclosure**
- c) deleting
- d) hacking

7. Before performing any penetration test, through legal procedure, which key points listed below is not mandatory?

- a) Know the nature of the organization
- b) Characteristics of work done in the firm
- c) System and network
- d) Type of broadband company used by the firm**

8. An ethical hacker must ensure that proprietary information of the firm does not get leaked.

- a) True**
- b) False

9. After performing \_\_\_\_\_ the ethical hacker should never disclose client information to other parties.

- a) hacking
- b) cracking
- c) penetration testing**
- d) exploiting

10. \_\_\_\_\_ is the branch of cyber security that deals with morality and provides different theories and a principle regarding the view-points about what is right and wrong.

- a) Social ethics
- b) Ethics in cyber-security
- c) Corporate ethics
- d) Ethics in black hat hacking**

**1. In terms of digital evidence, the Internet is an example of:**

- a. Open computer systems
- b. Communication systems
- c. Embedded computer systems**
- d. None of the above

**2. Computers can be involved in which of the following types of crime?**

- a. Homicide and sexual assault
- b. Computer intrusions and intellectual property theft
- c. Civil disputes
- d. All of the above**

**4. What are the three general categories of computer systems that can contain digital evidence?**

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- a. They are not connected to the physical world.
- b. Nobody can be harmed by crime on the Internet.
- c. They are easy to follow.
- d. Offenders who are unaware of them leave behind more clues than they otherwise would have.**

## MULTIPLE CHOICE QUESTIONS

### Chapter 1- Artificial Intelligence

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

- A. Heuristic
- B. Critical
- C. Value based
- D. Analytical

**Ans: A**

2. \_\_\_\_\_ do not guarantee optimal/any solutions

- A. Heuristic
- B. Critical
- C. Value based
- D. Analytical

**Ans: A**

3. Cognitive science related with \_\_\_\_\_

- A. Act like human
- B. ELIZA
- C. Think like human
- D. None of above

**Ans: C**

4. \_\_\_\_\_ Model should reflect how results were obtained. A. Design model

- B. Logic model
- C. Computational model
- D. None of above

**Ans: C**

5. Communication between man and machine is related with \_\_\_\_\_

A. LISP B.  
ELIZA

C. All of above D.  
None of above

**Ans: B**

6. ELIZA created by \_\_\_\_\_

A. John McCarthy

B. Steve Russell

C. Alain Colmerauer

D. Joseph Weizenbaum

**Ans: D**



7. The concept derived from \_\_\_\_\_ level are propositional logic, tautology, predicate calculus, model, temporal logic.

- A. Cognition level
- B. Logic level
- C. Functional level
- D. All of above

**Ans: B**

8. PROLOG is an AI programming language which solves problems with a form of symbolic logic known as \_\_\_\_\_.

- A. Propositional logic
- B. Tautology
- C. Predicate calculus
- D. Temporal logic

**Ans: C**

9. The \_\_\_\_ level contains constituents at the third level which are knowledge based system, heuristic search, automatic theorem proving, multi-agent system.

- A. Cognition level
- B. Gross level
- C. Functional level
- D. All of above

**Ans: B**

10. PROLOG, LISP, NLP are the language of \_\_\_\_\_

- B. Machine Learning
- C. Internet of Things
- D. Deep Learning

**Ans: A**

**11.** \_\_\_\_\_ is used for AI because it supports the implementation of software that computes with symbols very well.

A. LISP B.  
ELIZA C.  
PROLOG D.  
NLP

**Ans: A**

## Chapter-2 Internet of Things

1. MQTT stands for \_\_\_\_\_

- A. MQ Telemetry Things
- B. MQ Transport Telemetry
- C. MQ Transport Things
- D. MQ Telemetry Transport

**Ans: D**

2. MQTT is better than HTTP for sending and receiving data.

- A. True
- B. False

**Ans: A**

3. MQTT is \_\_\_\_\_ protocol.

- A. Machine to Machine
- B. Internet of Things
- C. Machine to Machine and Internet of Things
- D. Machine Things

**Ans: C**

4. Which protocol is lightweight?

- A. MQTT
- B. HTTP
- C. CoAP
- D. SPI

**Ans: A**

5. MQTT is:

- A. Based on client-server architecture
- B. Based on publish-subscribe architecture
- C. Based on both of the above
- D. Based on none of the above

**Ans: B**

6. XMPP is used for streaming which type of elements?

- A. XPL
- B. XML
- C. XHL
- D. MPL

**Ans: B**

7. XMPP creates \_\_\_\_\_ identity.

- A. Device
- B. Email
- C. Message
- D. Data

**Ans: A**

8. XMPP uses \_\_\_\_\_ architecture.

- A. Decentralized client-server
- B. Centralized client-server
- C. Message
- D. Public/subscriber

**Ans: A**

**9. What does HTTP do?**

- A. Enables network resources and reduces perception of latency
- B. Reduces perception of latency and allows multiple concurrency exchange
- C. Allows multiple concurrent exchange and enables network resources
- D. Enables network resources and reduces perception of latency and Allows multiple concurrent exchange.

**Ans: D**

**10. HTTP expands?**

- A. Hyper Text Transfer Protocol
- B. Hyper Terminal Transfer Protocol
- C. Hyper Text Terminal Protocol
- D. Hyper Terminal Text Protocol

**Ans: A**

### **Chapter-3 Basics of Digital Forensics**

**1. Which of following are Unethical norms for Investigator?**

- A. Uphold any relevant evidence.
- B. Declare any confidential matters or knowledge.
- C. Distort or falsify education, training, credentials.
- D. All of above

E. None of above

**Ans: D**

**2. Which of following is not general ethical norm for Investigator?** A. To contribute to society and human being.

- B. Uphold any relevant Evidence.
- C. To be honest and trustworthy.
- D. To honor confidentially.

**Ans: B**

**3. Which of following is a not unethical norm for Digital Forensics Investigation?**

- A. Uphold any relevant evidence.
- B. Declare any confidential matters or knowledge.
- C. Distort or falsify education, training, credentials.
- D. To respect the privacy of others.

**Ans: D**

4. What is called as the process of creation a duplicate of digital media for purpose of examining it?

A. Acquisition.

B. Steganography.

C. Live analysis

D. Hashing.

**Ans: A**

5. Which term refers for modifying a computer in a way which was not originally intended to view Information?

A. Metadata

B. Live analysis

C. Hacking

D. Bit Copy

**Ans: C**

6. The ability to recover and read deleted or damaged files from a criminal's computer is an example of a law enforcement specialty called?

A. Robotis

C. Computer Forensics

D. Animation

**Ans: C**

7. What are the important parts of the mobile device which used in Digital forensic?

A. SIM

B. RAM

C. ROM.

D. EMMC chip

**Ans: D**

Using what, data hiding in encrypted images be carried out in digital forensics?

A. Acquisition.

B. Steganography.

C. Live analysis

D. Hashing.

**Ans: B**

Which of this is not a computer crime?

C. Sabotage.

D. Identification of data

**Ans: D**

Which file is used to store the user entered password?

A. .exe

B. .txt

C. .iso

D. .asm

**Ans: D**



## Chapter-4 DIGITAL EVIDENCE

1. A Valid Definition of Digital Evidence is
  - a. Data Stored or transmitted using a computer
  - b. Information of Probative value
  - c. **Digital data of probative Value**
  - d. Any digital evidence on computer
  
2. In term of Digital evidence, a hard drive is example.of
  - a. **Open Computer System**
  - b. Communication System
  - c. Embedded Computer System
  - d. None of the Above
  
3. In term of Digital evidence, a mobile telephone is an example.of
  - a. Open Computer System
  - b. Communication System
  - c. **Embedded Computer System**
  - d. None of the Above
  
4. In term of Digital evidence, the internet is an example of
  - a. Open computer System
  - b. **Communication System**
  - c. Embedded Computer System
  - d. None of the above
  
5. Digital Evidence is only useful in court of law
  - a. True
  - b. **False**
  
6. Video Surveillance can be form of Digital evidence
  - a. **True**
  - b. False
  
7. Computer Can be Involved in which of the following types of crime
  - a. Homicide and sexual Assault
  - b. Computer intrusions and intellectual property theft
  - c. Civil disputes
  - d. **All of the above**

8. A logon record tells us that, at a specific time:
- a. An unknown person logged into the system using the account
  - b. The owner of a specific account logged into the system
  - c. The account was used to log into the system**
  - d. None of the above
9. Private networks can be a richer source of evidence than the Internet because:
- a. They retain data for longer periods of time.
  - b. Owners of private networks are more cooperative with law enforcement.
  - c. Private networks contain a higher concentration of digital evidence.**
  - d. All of the above
10. Digital evidence can be duplicated exactly without any changes to the original data.
- a. True**
  - b. False

## Chapter-5 Basics of Hacking

1. Which of the following statements best describes a white-hat hacker?
- A. Security professional**
  - B. Former black hat
  - C. Former grey hat
  - D. Malicious hacker
2. What is the first phase of hacking?
- A. Attack
  - B. Maintaining access
  - C. Gaining access
  - D. Reconnaissance**
  - E. Scanning

**3. What type of ethical hack tests access to the physical infrastructure?**

- A. Internal network
- B. Remote network
- C. External network
- D. Physical access**

**4. Which type of hacker represents the highest risk to your network?**

- A. Disgruntled employees**
- B. Black-hat hackers
- C. Grey-hat hackers
- D. Script kiddies

**5. Hacking for a cause is called \_\_\_\_\_**

- A. Active hacking
- B. Hacktivism**
- C. Activism
- D. Black-hat hacking

**6. Which federal law is most commonly used to prosecute hackers?**

- A. Title 12
- B. Title 18**
- C. Title 20
- D. Title 2

**8. port number does FTP use?**

- A. 21**
- B. 25
- C. 23
- D. 80

9. What is the primary goal of an Ethical Hacker?
- a. **Avoiding Detection**
  - b. Determining return on investment (ROI) for security measure
  - c. Resolving security vulnerabilities
  - d. Testing Security Controls
10. Leaking your company data to the outside network without prior permission of senior authority is a crime.
- a) **True**
  - b) False

### Chapter-6 Types Of Hacking

1. Hackers who help in finding bugs and vulnerabilities in a system & don't intend to crack a system are termed as \_\_\_\_\_
- a) Black Hat hackers
  - b) **White Hat Hackers**
  - c) Grey Hat Hackers
  - d) Red Hat Hackers
2. Which is the legal form of hacking based on which jobs are provided in IT industries and firms?
- a) Cracking
  - b) Non ethical Hacking
  - c) **Ethical hacking**
  - d) Hactivism
3. They are nefarious hackers, and their main motive is to gain financial profit by doing cyber crimes. Who are "they" referred to here?
- a) Gray Hat Hackers
  - b) White Hat Hackers
  - c) Hactivists
  - d) **Black Hat Hackers**
4. \_\_\_\_\_ are the combination of both white as well as black hat hackers.
- a) **Grey Hat hackers**
  - b) Green Hat hackers
  - c) Blue Hat Hackers
  - d) Red Hat Hackers

5. The amateur or newbie in the field of hacking who don't have many skills about coding and in-depth working of security and hacking tools are called \_\_\_\_\_
- a) Sponsored Hackers
  - b) Hactivists
  - c) Script Kiddies**
  - d) Whistle Blowers
6. Criminal minded individuals who work for terrorist organizations and steal information of nations and other secret intelligence are \_\_\_\_\_
- a) State sponsored hackers
  - b) Blue Hat Hackers
  - c) Cyber Terrorists**
  - d) Red Hat Hackers
7. These types of hackers are the most skilled hackers in the hackers' community. Who are "they" referred to?
- a) White hat Hackers
  - b) Elite Hackers**
  - c) Licensed Penetration Testers
  - d) Red Hat Hackers
8. \_\_\_\_\_ are those individuals who maintain and handles IT security in any firm or organization.
- a) IT Security Engineer**
  - b) Cyber Security Interns
  - c) Software Security Specialist
  - d) Security Auditor
9. Governments hired some highly skilled hackers. These types of hackers are termed as \_\_\_\_\_
- a) Special Hackers
  - b) Government Hackers
  - c) Cyber Intelligence Agents
  - d) Nation / State sponsored hackers**
10. \_\_\_\_\_ security consultants uses database security monitoring & scanning tools to maintain security to different data residing in the database / servers / cloud.
- a) Database**
  - b) Network
  - c) System
  - d) Hardware