

BCA 5th SEM
Cyber Security and Cyber Law
Unit-1
Introduction to Cybercrime

2 Marks Questions

1. Define Cyber Crime?
2. Define Cyber Space?
3. Define cyber security?
4. Who are the cyber criminals?
5. What is spamming?
6. Define E-Mail Spoofing?
7. What do you mean by salami attack?
8. Define web Jacking?
9. What do you mean by password sniffing?
10. What is Identity theft?
11. What is cyber stalking?
12. What do you mean by cyber defamation?
13. Define Phishing?
14. What is DoS(Denial of service attack) ?
15. Define Cyber terrorism?

5 Marks Questions

1. Write any five different definitions of cyber crime?
2. Explain the various categories of cyber criminals?
3. Explain the following a) credit card fraud b) Internet time theft c) Intellectual property crime?
4. Explain about legal perspectives of Cybercrimes?
5. Explain about Indian perspectives of Cybercrimes?
6. Explain the following
 - a) E-Mail Virus attack/dissemination of viruses
 - b) E-Mail bombing/mail bombs
 - c) Logic bomb
 - d) Trojan Horse
 - e) Software piracy
7. Explain the classification of cyber crime?(5 Marks OR 10 Marks)
8. Discuss about the Indian ITA 2000? (5 Marks OR 10 Marks)

BCA 5th SEM
Cyber Security and Cyber Law
Unit-2
Cyber offenses & Cybercrime

2 Marks Questions

1. Who are Crackers, hackers?
2. Who are Phreakers?
3. Define Brute force hacking?
4. What is inside and outside attack?
5. What is active attack & Passive attack?
6. Define Social Engineering?
7. What do you mean by cyber stalking?
8. Define Botnet?
9. What is attack vector?
10. Define Mishing?
11. Define smishing?
12. Define Vishing?
13. What is port scanning?
14. Define Cryptography?

5 Marks Questions

1. Explain the 3 phases involved in planning cybercrime?
2. What is social engineering? Explain the types of social engineers or classification of social engineering?
3. What is cyber stalking? Explain its types?
4. What are the security tips for cyber cafe?
5. What is botnet? How it works?
6. Explain cloud computing and cyber crime?
7. Explain Proliferation (Growth) of Mobile and Wireless Devices?
8. Write a short note on trends in mobility?
9. What are the different types of attacks against 3G mobile networks?
10. Write a short note on Credit Card Frauds in Mobile and Wireless Computing Era?
11. Explain the Types and Techniques of Credit Card Frauds?
12. Write a short note on
 - a) Mobile phone theft
 - b) Mobile viruses
13. Write a note on a)Mishing b)Vishing c)Smishing
14. Discuss about Authentication Service Security?
15. What are different security challenges posed by mobile devices? Explain?
16. Explain Bluetooth hacking tools and various types of Bluetooth attacks?
17. What are the physical security counter measures for laptop?
18. What are different security challenges posed by mobile devices? Explain? [10 marks]

19. What are different Registry Settings for Mobile Devices? Explain? [10Marks]
20. Write about Mobile/Cell Phone attacks? [5M]
21. Discuss about Authentication Service Security?
22. Discuss about the Security implications for Organizations?
23. What different Organizational measures for handling Mobile?
24. Explain about the Organizational Security policies for mobile devices?
25. What are different security policies on measures in Mobile devices?
26. Explain about different Cyber Security aspects of Mobile and Wireless Device.
27. What are different Security policies on Laptops and Wireless devices? Explain?

BCA 5th SEM
Cyber Security and Cyber Law
Unit-3
Tools and Methods Used in Cybercrime

2 Marks Questions

1. What is proxy server? Define Anonymizers?
2. Define password cracking?
3. Define key loggers and Anti key logger?
4. What is spyware?
5. Define virus and worm?
6. What do you mean by Trojan Horse and Backdoor attack?
7. Define Steganography and cryptography?
8. What is DoS Attack?
9. What is DDoS attack?
10. What is SQL Injection?
11. What is buffer overflow?
12. Define digital signature?
13. Define Personally Identifiable Information (PII)?

5 Marks Questions

1. What are the different ways of password cracking?
2. Explain the general guidelines applicable to the password policy.
3. How can key loggers be used to commit a cybercrime?
4. What are the advantages of using anti-keylogger?
5. What is the difference between a virus and a worm?
6. What are the different types of viruses? Explain in details.
7. What is the difference between Trojan Horses and backdoor?
8. How do you protect from Trojan Horses and Backdoors?
9. What is the difference between steganography and cryptography?
10. What is the difference between DoS and DDos?
11. How do we classify the DoS attacks? Explain each one briefly.(5 or 10 marks)
12. How do you protect from Dos/DDos attack?
13. What is a SQL injection and what are the different countermeasures to prevent the attack?
14. What are the different buffer overflow attacks?
15. Why do we need cyber law? Explain?
16. Explain about the Cybercrime and punishments in India?
17. Write a short note on Amendments in the Indian IT Act?
18. Write a short note on phishing?
19. Explain phishing methods and techniques?
20. Write a short note on identity theft?
21. Discuss about digital signatures in Cyber security?
22. Write about digital signature in IT ACT india?
23. Discuss about the Cybercrime impact on students in Indian scenario?

BCA 5th SEM
Cyber Security and Cyber Law
Unit-4
Understanding Computer Forensics

2 Marks Questions

1. What is Digital forensics?
2. Define forensic science and computer forensic?
3. What is network forensics?
4. What is chain of custody?
5. Define forensic auditing?
6. What anti forensic?

5 Marks Questions

1. Discuss about the Historical background of Cyber forensics?
2. Discuss about the Forensics Science and Computer Forensics?
3. Write about Digital Forensics?
4. Why we need the Computer Forensics?
5. Explain about Cyber Forensics and digital evidence?
6. Write about Forensics analysis of Email?
7. Explain about digital Forensics lifecycle? [10Marks]
8. Explain about Chain of Custody with Example?
9. Discuss about Network Forensics?
10. Write about Forensics Investigations?
11. Explain about Forensics Investigation in India?
12. Discuss about the challenges in computer forensics?
13. Explain about the tools and techniques in computer forensics?
14. Explain the OSI 7 Layer Model to the Computer Forensics and Social Networking Sites? [10 Marks]
15. What is Forensics auditing? Explain?

NETWORK SECURITY QUESTION BANK

Two Marks Questions:

1. What is network security?
2. What is cyber-attack?
3. What is cryptography?
4. Define vulnerability. And list the 4 important vulnerabilities.
5. What is phishing attack?
6. What is pharming attack?
7. Define eaves-dropping or snooping?
8. What is encryption?
9. What is decryption?
10. Define plaintext and ciphertext.

Five Marks Questions:

1. Write a note on common attacks.
2. Explain the 4 important vulnerabilities.
3. Explain the 3 main motives of cyber-attack.
4. Mention the properties of modulo arithmetic. And prove any one of the properties for $n = 8$, $a = 27$ and $b = 34$.
5. Write a note on two types of cryptography (secret key/symmetric key cryptography & public key/asymmetric key cryptography).
6. Explain the following:
 - i. Monoalphabetic cipher with an example of plaintext given below:
Plaintext: WHAT IS THE POPULATION OF MARS
 - ii. The Vigenere cipher with an example of plaintext and key given below:

Plaintext	W	I	S	H	I	N	G	Y	O	U	S	U	C	C	E	S	S
Key	04	19	03	22	07	12	05	11	04	19	05	11	04	19	03	22	07

7. Write a note on The Hill Cipher. Consider a hill cipher using a block size of 'm=2', plaintext be $P = [HI]$ and $K = \begin{bmatrix} 3 & 7 \\ 15 & 12 \end{bmatrix}$. Compute the ciphertext 'c'.
8. Define the elementary transposition cipher. Consider the plaintext: "Begin Operation at Noon". Rearrange the rows as 1 -> 3, 2 -> 5, 3 -> 2, 4 -> 1, 5 -> 4. And columns as 1 -> 4, 2 -> 3, 3-> 1, 4 -> 2. And generate the ciphertext.
9. Compute gcd (161, 112) using Euclidean algorithm.

Ten Marks Questions:

1. What is Chinese remainder theorem? Let $N = 210$ and let $n_1=5, n_2=6, n_3=7$. Compute f
2. Write a note on defence strategies and techniques.
3. Write a note on guiding principles. (8 principles)