

BHARATI VIDYAPEETH INSTITUTE OF TECHNOLOGY

QUESTION BANK

Unit Test-II

Program: - Information Technology

Program Code:-4K

Course Title: - Information Security

Semester: - Fourth

Course Abbr &Code:- INS (314319)

Scheme: K

Chapter 3 – FUNDAMENTALS OF CRYPTOGRAPHY (CO3)

2 Marks

1. Define: a) Cryptography b) Cryptanalysis c) Encryption d) Decryption
2. Define: a) Plain Text b) Cipher Text c) Cryptology d) Steganography
3. Explain the terms with example: 1) Piggy-backing 2) Shoulder Surfing 3) Dumper diving

4 Marks

1. Describe Caesar's cipher substitution techniques of cryptography. What is the output of plain text "Computer Security is important"?
2. How does simple columnar transposition techniques work? Explain the algorithm with example.
3. Explain Rail fence technique with algorithm. Encrypt the plain text message "I AM A HACKER" with the help of Rail Fence technique.
4. What is Steganography? How it works? Explain in detail.

Chapter 4 – ENCRYPTION ALGORITHMS (CO4)

2 Marks

1. What is Encryption Algorithm?
2. List the features of Hash Functions.
3. What are the types of MITM Attack?
4. What is digital Signature?

4 Marks

1. Describe Threats to mobile phone. How to prevent them? Explain in detail.
2. What is RSA Algorithm? How it works? Explain with example.
3. Describe Diffie-Hellman key exchange algorithm in detail.
4. How to apply AES algorithm to encrypt given text? Explain with example.
5. What is digital signature? Explain its working with diagram.
6. Differentiate between MD5 and SHA (minimum 4 points).

Chapter 5 – INTERNET SECURITY & CYBER LAW (CO5)

2 Marks

1. What is Honeypot?
2. Define: 1) Hacking 2) Digital forgery 3) Cyber Stalking/Harassment 4) Cyber pornography 5) IDS
3. Explain email security techniques.
4. What is cyber-crime? List different types of cyber-crime?
5. What is internet security?

4 Marks

1. What are the limitations of firewall.?
2. With the help of diagram explain host-based and network-based IDSs. Also compare them.
3. Describe the working principle of firewall.
4. What is the importance of cyber law.
5. How do we classify cyber-crimes? Explain each one briefly.
6. Describe SMTP in e-mail security.
7. What is cyber law and why it is needed.