

Scheme – G

Sample Question Paper

Course Name : Computer Engineering Group

Course Code : CO/CM

Semester : Fifth

Subject Title : Computer Security

Marks : 100 Marks

17514

Time: 3 Hrs.

Instructions:

1. All questions are compulsory
2. Illustrate your answers with neat sketches wherever necessary
3. Figures to the right indicate full marks
4. Assume suitable data if necessary
5. Preferably, write the answers in sequential order

Q1.(a) Attempt any THREE

12 Marks

- a) Describe friads Computer Security
- b) Describe Piggybacking and Shoulder Surfing
- c) Define the following term (i) Plaintext ii) Ciphertext iii)Encryption iv) Decryption
- d) Define term Worm? Why Worms are different from virus?

Q1.(b) Attempt any ONE

06 Marks

- a) Describe the following attacks- i)Denial of Service ii) Man in Middle attack
- b) Describe following terms of Intellectual Property- i)Copyright ii)Patent iii)Trademark

Q2. Attempt any TWO

16 Marks

- a) Give Equation for calculation of Risk? Describe the term associated with risk- i) Assets ii) Threats
iii) Vulnerabilities
- b) Describe DAC, MAC and RBAC access control model.
- c) Describe Digital Signature mechanism with neat diagram

Q3. Attempt any FOUR

16 Marks

- a) Describe Packet Filtering router firewall with neat diagram.
- b) What is Dumpster Diving? State 3 Preventative measure to avoid Dumpster Diving
- c) What is hashing? State its 4 properties
- d) Explain working principal of virtual private network with its label sketch

- e) Describe any two terms i) Application Patches ii) Hotfix iii) Upgrades

Q4.(a) Attempt any THREE

12 Marks

- a) Define Caesar Cipher? Write its Algorithm and Convert following plaintext
“I AM A HACKER” into cipher text using Caesar Cipher
- b) Describe the working principal of SMTP.
- c) Describe hacking and cracking related to cybercrime
- d) What is Secure Electronic Transaction? Enlist and describe any four components of SET

Q4.(b) Attempt any ONE

06 Marks

- a) Describe how the intruder are different from insider who is more dangerous.
- b) Describe the Sniffing and Spoofing in security attack with neat diagram.

Q5. Attempt any TWO

16 Marks

- a) Describe the role of people in the security
- b) What is Intrusion Detection System? Describe HIDS and NIDS with neat diagram
- c) What is IPSec? Describe AH and ESP modes of IPSEC

Q6. Attempt any FOUR

16 Marks

- a) Describe Individual user Responsibility in Security.
- b) How does simple columnar transposition technique works? Write its algorithm with example
- c) Describe various security zones in security topologies.
- d) How formatted partition can be recovered
- e) Explain secure socket layer? With Neat sketch describe the SSL Protocol Stack

Scheme – G

Sample Test Paper-I

Course Name : Computer Engineering Group

Course Code : CO/CM

Semester : Fifth

Subject Title : Computer Security

Marks : 25 Marks

17514

Time: 1 Hour

Instructions:

1. All questions are compulsory
2. Illustrate your answers with neat sketches wherever necessary
3. Figures to the right indicate full marks
4. Assume suitable data if necessary
5. Preferably, write the answers in sequential order

Q1. Attempt any THREE (3 x 3)

(9 Marks)

- a) Define term Computer Security? What is the need of Computer Security?
- b) Describe Biometrics in terms of Finger Print & Hand Print.
- c) What is Dumpster diving? Give preventive measures to avoid it.
- d) Which are the individual user's responsibilities in security?

Q2. Attempt any TWO (2 x 4)

(8 Marks)

- a) State the role of people in security
- b) Describe threat to security in terms of Intruders & Insiders
- c) Describe various phases of Virus life cycle

Q3. Attempt any TWO (2 x 4)

(8 Marks)

- a) Describe goals of Computer Security
- b) Describe DOS Attack with neat diagram
- c) Describe following terms –
 - i. Sniffing
 - ii. Spoofing

Scheme – G

Sample Test Paper-II

Course Name : Computer Engineering Group

Course Code : CO/CM

Semester : Fifth

Subject Title : Computer Security

Marks : 25 Marks

17514

Time: 1 Hour.

Instructions:

1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

Q1. Attempt any THREE (3 x 3) (9 Marks)

- a) Define following terms –
(i) Cryptography (ii) Cryptanalysis (iii) Cryptology
- b) What is IDS? Describe HIDS & NIDS with neat sketch.
- c) Describe hacking & cracking related to cyber crime
- d) Define IPSec. Describe AH mode of IPSec with neat diagram.

Q2. Attempt any TWO (2 x 4) (8 Marks)

- a) What is Cipher Text? Convert “Computer Security” into cipher text using Rail Fence transposition techniques.
- b) State characteristics of IT Act 2008.
- c) Describe Application hardening in detail.

Q3. Attempt any TWO (2 x 4) (8 Marks)

- a) How Cybercrime are investigated?
- b) How Pretty Good Privacy (PGP) email security works?
- c) Describe how online payment processing is done.