2123
M.E. Computer Science and Engineering (Cyber Security)
First Semester
Elective - II
CSN-8105: Introduction to Information Security

Time allowed: 3 Hours   Max. Marks: 50

NOTE: *Attempt* <u>*five*</u> *questions in all, including Question No. 1 (Section-A) which is compulsory and selecting two questions from each Section B-C.*

x-x-x

Section -A

Q 1(a)	What are monoalphabetic Ciphers?	(10)
(b)	What is DNS Poisoning?	
(c)	List the different tools for Proxying.	
(d)	List the different types of Firewalls.	
(e)	List the different File and Folder permissions that can be set.	

Section -B

Q2   Compare and Contrast between symmetric and asymmetric cryptography? Describe their main   (10)
ingredients. Encode "CyberSecurityInfo" with key CSNO.

Q3 (a) What are the different types of phishing attacks? How to detect it and what could be the preventive   (5)
measures?

(b)   Describe the implementation of transposition ciphers using an example?   (5)

Q 4 (a) How packet sniffers can be detected in a network? Describe the purpose and different tools used for   (5)
packet sniffing.

(b)   What is Man in Middle attack? Which applications are affected and how to avoid it.   (5)

Section - C

Q5   Illustrate the use of stateful Firewall at application layer. Explain the firewall architecture in detail to   (10)
enforce security.

Q6 (a) How Security at transport layer is provided? Discuss the various approaches.   (5)

(b)   Highlight the main features of Intrusion prevention and Intrusion Detection Systems. Describe the   (5)
various tools used for this.

Q7 (a) Describe the main elements of a Security Policy? What are the main challenges in implementing a   (5)
security policy?

(b)   What are the main advantages of VPN? Explain the use and advantage of IPSec?   (5)

x-x-x