MASTER OF SCIENCE (INFORMATION SECURITY) (MSCIS) / P.G. DIPLOMA IN INFORMATION SECURITY (PGDIS)

Term-End Examination

June, 2022

MSEI-022 : NETWORK SECURITY

Time : 2 hours   *Maximum Marks : 50*

Note :

*Section A – Answer **all** the objective type questions.*

*Section B – Answer **all** the very short answer type questions.*

*Section C – Answer any **two** questions out of three short answer type questions.*

*Section D – Answer any **two** questions out of three long answer type questions.*

SECTION A

*Answer **all** the questions.*

1. Write *True* or *False* :   *5×1=5*

    (a) Fingerprints can be used for identification.

    (b) Network layer firewall is always stateful and never stateless.

(c) Hypertext Transfer Protocol (http) is meant to transmit and receive information across the Internet.

(d) WEP is more secure than WPA-2 Protocol.

(e) TLS and SSL are protocols used at Network layer.

2. Fill in the blanks : *5×1=5*

(a) Video watermarking, Audio watermarking, Text watermarking, etc. are applications of _____ .

(b) The full form of LDAP is _____ .

(c) A _____ is a physical trait that consists of facial structure, eye colour, voice, iris, pattern and fingerprint.

(d) Algorithms for performing encryption and decryption are known as _____ algorithms.

(e) A network of compromised devices owned by attackers are known as _____ .

SECTION B

*Answer **all** the questions.*

3. Write short notes on the following :   *5×2=10*

    (a)   Pretty Good Privacy

    (b)   Port Scanning Tools

    (c)   Public Key Infrastructure

    (d)   Intrusion Detection System

    (e)   Routers

SECTION C

*Answer any **two** questions out of three short answer type questions.* *2×5=10*

4. Explain how key distribution is achieved in symmetric key encryption. *5*

5. Illustrate the difference between SSH and SSL. Which one is more secure ? Which of the two, i.e. SSH and SSL has more potential vulnerabilities ? Explain. *5*

6. Describe the main properties of Digital Signatures. *5*

SECTION D

*Answer any **two** questions out of three long answer type questions.* *2×10=20*

7. What are various security issues in wireless connections ? Explain the process of WEP encryption and WEP decryption, with the help of a suitable diagram. *10*

8. Explain authentication mechanism, with the help of a suitable diagram. *10*

9. Describe IDS and IPS. Is Honey Pot an IDS or an IPS ? Justify your answer. *10*

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