

**P.G. DIPLOMA IN INFORMATION SECURITY
(PGDIS)**

Term-End Examination

June, 2021

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) Symmetric encryption is best used for small blocks of data, digital signatures, digital envelopes and digital certificates.

(b) IPSec is designed to provide security at the transport layer.

- (c) Bluetooth is an example of PAN.
- (d) Full form of PGP is Pretty Good Privacy.
- (e) WEP is less secure than WPA.

2. Fill in the blanks :

5×1=5

- (a) The signal where the watermark is to be embedded is called the _____ .
- (b) An attempt to make a computer resource unavailable to users is called _____ attack.
- (c) A network of compromised devices owned by attackers is known as _____ .
- (d) The multiple access technique used by IEEE 802.11 standard for wireless LAN is _____ .
- (e) _____ can be defined as the practice and study of hiding information.

SECTION B

Answer ***all*** the questions.

3. Write short notes on the following :

5×2=10

- (a) E-mail spoofing
- (b) Trojan horses
- (c) Hash function
- (d) Port scanning tools
- (e) Routers

SECTION C

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

4. Illustrate the difference between symmetric cryptography and asymmetric cryptography. 5
5. Explain in detail about “Key” establishment and its types. 5
6. Explain Vulnerabilities, Threats, Attacks and Controls with suitable example of each. 5

SECTION D

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

7. Explain types of Firewalls with the help of diagram. 10

 8. Explain Diffie-Hellman key exchange protocol. Is it prone to MITM attack ? Why or why not ? Discuss and explain. 10

 9. Explain Network Layer Attack. Discuss Packet Sniffing in detail. 10
-