

00941

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

Term-End Examination

June, 2016

MSEI-022 : NETWORK SECURITY

Time : 2 hours

Maximum Marks : 50

- Note :**
- (i) *Section - A - Answer all the objective type questions.*
 - (ii) *Section - B - Answer all the very short answer type questions.*
 - (iii) *Section - C - Answer any two questions out of three.*
 - (iv) *Section - D - Answer any two questions out of three long type questions.*

SECTION - A

(Attempt all the questions.)

1. Write true or false : 1x5=5
- (a) Digital signature require the sender to use the private key.
 - (b) Symmetric encryption is best used for small blocks of data, digital signatures, digital envelopes, and digital certificates.
 - (c) A cipher is a cryptographic system of symbols that represent words or phrases that may be secret but not always confidential.

- (d) Collisions are a well-known weakness in cryptography in which plain text messages can generate identical cipher - text messages using different keys and the same algorithm.
- (e) Hypertext Transfer Protocol (http) is a means for transmitting and receiving information across the internet.

2. Fill in the blanks :

1x5=5

- (a) Full form of CHAP is _____.
- (b) Full form of LDAP is _____.
- (c) The signal where the watermark is to be embedded is called the _____.
- (d) A _____ is a trapset to detect, deflect or in some manner counteract attempts at unauthorized use of information systems.
- (e) A _____ is a s/w or h/w based network security system that controls the incoming and outgoing network traffic based on applied rule-set.

SECTION - B

(Attempt all the questions.)

3. Write short note on following :

5x2=10

- (a) Public Key Infrastructure
- (b) Steganography
- (c) Distinguish between vulnerabilities, threat and control
- (d) Risk Analysis
- (e) Session Hijacking

SECTION - C

(Attempt 2 out of 3 short type questions.)

4. Explain, how key distribution is achieved in symmetric key encryption. 5
5. What is digital signature ? Describe a public key method to create and check digital signatures. 5
6. What is cryptography ? Define various encryption terms used. 5

SECTION - D

(Attempt 2 out of 3 long type questions.)

7. With the help of neat diagram, briefly explain the types of fire walls. 10
 8. Explain Network Layer Attack. Discuss packet sniffing in detail. 10
 9. Describe different types of Intrusion Detection Systems (IDS). 10
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