

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

Term-End Examination

December, 2015

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* question out of *three*.
 - (iv) **Section - D** - Answer *any two* question out of *three* long type questions.

SECTION - A

(Attempt **all** the questions)

1. Write **True** or **False**. **5x1=5**
- (a) A Key - logger is a small hardware device or a program that monitor each keystroke a user types on the computer's keyboard.
 - (b) A firewall is a device with set of rules to permit ordinary network access by unauthorized services.
 - (c) TCP/IP hijacking is successful because protocols, such as File Transfer Protocol (FTP) and Telnet, do not check the source IP addresses of the device from which they receive packets.

- (d) Hardware firewalls usually are located inside the network security perimeter as the last line of defense.
- (e) Malware is simply an Web-advertisement and does not pose substantial risk to large organizations.

2. Fill in the blanks :

5x1=5

- (a) A _____ is a trap set to detect, deflect or in some manner counteract attempts at unauthorized use of information system.
- (b) Full form of LDAP is _____.
- (c) The signal where the watermark is to be embedded is called the _____.
- (d) _____ is a secret - key network authentication service developed at MIT by Project Athena.
- (e) A _____ is a mathematical scheme for demonstrating the authenticity of a digital message or document.

SECTION - B

(Attempt **all** the questions)

3. Write short notes on the following :

5x2=10

- (a) Next Generation Networks
- (b) Hash function
- (c) Trojan horses
- (d) E-mail Spoofing
- (e) Dictionary attack

SECTION - C

(Attempt **2 out of 3** short type questions)

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| 4. | Describe the types of IDSs and their limitations. Why we need hybrid IDSs ? | 5 |
| 5. | Give the difference between Symmetric and Asymmetric Cryptography. | 5 |
| 6. | Explain the types of digital watermarks. | 5 |

SECTION - D

(Attempt **2 out of 3** long type questions)

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| 7. | Explain the application of Biometrics technology in detail. | 10 |
| 8. | What is an authentication mechanism ? Explain in detail. | 10 |
| 9. | Explain the role of a firewall in securing the network. Describe different types of firewalls. | 10 |
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