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MSEI-022

P.G. DIPLOMA IN INFORMATION SECURITY (PGDIS)

Term-End Examination 01559

June, 2013

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.***
Section D *- Answer* ***any two*** *questions out of* ***three.***

SECTION - A

(Attempt all the questions)

1. Write *true* or *false :* 1x5=5

   (a) Computer equipment and software utilizing two such keys are often collectively termed as 'asymmetric crypto system'.

   (b) Digital signatures are created and verified by cryptography.

   (c) A firewall is a device with set of rules to permit ordinary network access by unauthorized services.

(d) Network security is preliminary act of organizations, enterprises and institutions to protect their valuable information across the network.

(e) A 'Hash Function' is a complex encryption algorithm used primarily in cryptography.

2. Fill in the blanks : 1x5=5

(a) _____reduce the physical work of changing cassettes and can make restore time quicker.

(b) _____ attack exploits the way that the Internet Protocol (IP) requires a packet that is too large for the next router to handle be divided into fragments.

(c) When an entity of a system is altered to allow an attacker to produce an unauthorized effect on command or at a predetermined event or sequence of events, the result is called a _____.

(d) The signal where the watermark is to be embedded is called the _____.

(e) _____ enables an entity to be verified as that which the entity claims itself to be.

SECTION - B

(Attempt *all* the questions)

3. Write short notes on the following : 5x2=10

   (a) Next Generation Networks

   (b) Secur ID system

   (c) Public key infrastructure

   (d) Hash function

   (e) ADAM

SECTION - C

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

4. Explain the role of security protocols. 5

5. Explain the characteristics of watermarks. 5

6. Explain the role of message authentication code. 5

SECTION - D

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

7. Explain the process of encryption in detail. 10

8. What is authentication mechanism ? Explain in detail. 10

9. Write in detail about the concept of digital signatures. How is it different from the handwritten signatures. 10