SARDAR PATEL UNIVERSITY
MASTER OF SCIENCE (INFORMATION TECHNOLOGY)
SEMESTER – III
COURSE PS03CINT03 (INFORMATION SECURITY)
Thursday April 7th 2016

Time: 2:30 pm to 5:30 pm   **Max. Marks: 70**

Q-1 Choose the most appropriate option for each question: [8]

1. What is the range of the first byte in a class C address?
   A) 1 to 127   B) 128 to 191
   C) 192 to 223   D) 224 to 239

2. What is the act of providing wrong source address in an IP packet called?
   A) VPN   B) Sniffing
   C) Firewall   D) Spoofing

3. Which of the following is *not* a type of firewall?
   A) Network level gateway   B) Application level gateway
   C) Circuit level gateway   D) Packet filtering firewall

4. A collection of algorithms and associated procedures for hiding and unhiding information is called -
   A) Cryptology   B) Cryptosystem
   C) Cryptanalysis   D) None of these

5. What is the most common use of PGP?
   A) Securing messages   B) Hiding messages
   C) Hiding files   D) Sending files

6. Which of the following is not a form of authentication under IIS?
   A) Basic   B) Advanced
   C) SSL   D) Challenge-response

7. What is the name of the default Java security policy file?
   A) java.policy   B) java.security
   C) policy.java   D) security.java

8. What is the full form of CGI?
   A) Common Gateway Interaction   B) Computer Gateway Interface
   C) Common Gateway Interface   D) Computer Gateway Interface

Q-2 Answer the following questions (Any Seven):   [14]

1. List the degrees of trust in PGP.
2. Explain in brief the functionality of the ifconfig and ipconfig commands.
3. Give the full forms of DNS and DHCP.
4. What is a firewall? What are the elements / activities that they can control?
5. List goals of cryptography.
6. Differentiate between symmetric and asymmetric cryptography.
7. Give the reasons as to why should we use PGP.

8. Explain the IIS directory structure in brief.
9. Which programming languages can be used to write CGI programs? What is the output of a CGI program?

Q-3 Answer the following questions:
   A. Write a short note on any three network configuration files or commands. [6]
   B. Write a short note on IP sniffing and spoofing. [6]
<div align="center">OR</div>
   B. Explain the functioning of different types of firewalls in brief. [6]

Q-4 Answer the following questions:
   A. Write a short note on the working and advantages of firewalls. [6]
   B. List basic encryption techniques. Explain any two techniques with examples. [6]
<div align="center">OR</div>
   B. Write a short note on public key cryptography. [6]

Q-5 Answer the following questions:
   A. What are the steps to configure and setup PGP? Explain PGP Key Rings. [6]
   B. Write any six options to the pgp command along with their functions. [6]
<div align="center">OR</div>
   B. Explain security subsystem of Windows NT. [6]

Q-6 Answer the following questions:
   A. Explain user accounts, groups, roles, rights and permissions with respect to Windows NT. [6]
   B. Write a short note on Java security. [6]
<div align="center">OR</div>
   B. Write a short note on CGI security. [6]

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