

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – I • EXAMINATION – WINTER • 2013

Subject code: 715104

Date: 01-01-2014

Subject Name: Network Defense and Countermeasures

Time: 10.30 am – 01.00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q. No. 1

[2 Marks X 07= 14 Marks]

- a. Define War Driving?
- b. Differentiate between Phishing & Vishing?
- c. What are the drawbacks of a packet filtering firewalls?
- d. What is bastion Host?
- e. Name any two layer3 protocol?
- f. Name any two version control systems?
- g. Differentiate between threat and risk?

Q. No. 2

- a. Explain SNAT [6 Marks]
 - b. Explain DNAT [8 Marks]
- Or
- b. Explain [8 Marks]
 1. Two differences between IPV4 & IPV6?
 2. What are the drawbacks of a packet filtering firewalls?
 3. What is an Access Control List?
 4. Difference between IDS & IPS

Q. No. 3

- a. Discuss the purpose of raw Table in iptables. [7 Marks]
- b. Explain rule based and anomaly detection in IDS. [7 Marks]

Or

Q. No. 3

- a. Explain the two main protocols used by IPSec. [7 Marks]
- b. Explain the post-routing chain in detail. [7 Marks]

Q. No. 4

- a. Explain the three types of security mechanisms in detail. [8 Marks]
- b. Explain the four critical functions of VPN. [6 Marks]

Or

Q. No. 4

Discuss the role of Spanning Port, Hubs and TAPs in IDS / IPS architecture. [14 Marks]

Q. No. 5

What is snort signature? Explain the structure of a signature with some examples.
[14 Marks]

Or

Q. No. 5

What is tcpdump? Explain it's features and uses from a network security perspective.
[14 Marks]