Enrolment No._____

GUJARAT TECHNOLO	GICAL UNIVERSITY
M. E SEMESTER – I • EXAM	INATION – 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] O. 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] O. 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]