

CSC650 SECURE NETWORKED SYSTEMS

Homework 3

Due: 7:00PM, Tuesday, 04/19/2016

1. What is the difference between phishing and baiting? Give one example for each of them. (15 Points)
2. What are the five layers in the Internet protocol stack? What are the principal responsibilities of each of these layers? (15 Points)
3. At which layer in the Internet protocol stack does the TCP sequence prediction attack occur? At which layer does the routing manipulation attack occur? (10 Points)
4. What is the TCP sequence prediction attack? How to prevent it? (10 Points)
5. What are the three components in IPsec? What are their functionalities, respectively? (15 Points)
6. Draw the structure of the datagram transmitted in Transport Mode and in Tunnel Mode, respectively, when AH is used. (10 Points)
7. What is the DDoS attack? How to use ICMP Traceback to mitigate the DDoS attack? (15 Points)