



University of Technology
Department of Computer Sciences
Final Examination 2011-2012



Subject: Network Security
Division: Computer Security - 4th Class
Examiner: Dr.Mazin S. Ali

Year: 2011-2012
Time: 3 Hours
Date: 7 / 6 /2012

Answer 6 Questions Only (10 marks for each questions)

- Q1: Describe in brief the following Microsoft Network Security Solutions:
- A. Microsoft's Windows 2000 Authentication Scheme.
 - B. Microsoft's Windows NT Authentication Scheme.
 - C. Windows Firewall (also explains what it does and does not do).
- Q2:
- A. Define the "Intrusion Detection System", and then describe in brief each type of it (*Signature-based and Heuristic Intrusion Detection Systems*).
 - B. Explain in details the Intrusion Detection System's "Stealth Mode" and "False Results".
- Q3: Explain in details who the following attack can be done:-
1. Distributed Denial of Service (DDoS) Attack.
 2. Wiretapping (on Cable, Microwave and Optical Fiber Cable).
- Q4: Draw the overview figure for "Encrypted E-Mail Processing", and then explain how can get the "Message Confidentiality" and "Message Integrity" requirements for Secure e-Mail.
- Q5: Compare between the following:-
1. "Packet Filtering Gateways" and "Application Proxies".
 2. IPsec (*Internet Protocol Security*) and HTTPs (*HTTP Secure*).
 3. "Missdelivery" and "Exposure" / Message Confidentiality Violations.
- Q6: Describe in details the security involving programs based "Service Problems" (*Greedy Programs, Viruses, Bacteria and Worms*).
- Q7: Define the following:
1. "Automatic Call-Back" Port Protection
 2. " Silent Modem" Port Protection
 3. "Pad Traffic" Traffic Control
 4. "Routing Control" Traffic Control
 5. "Connectivity" Denial of Service Attack
 6. "Flooding" Denial of Service Attack

- Good Luck -