Ethical Hacking 3 (SPY 2008)

Assignment 2



Submitted By- Submitted To-

Your Name
University Number: 123456

Dr. Mohammad Shoab Department of Computer Science Shaqra University

Instructions:

- The assignment must be handwritten.
- Use A4 papers to write the assignment.
- Draw diagrams wherever relevant. Explain your notations explicitly and clearly.
- An incomplete assignment is NOT acceptable for submission.
- Arrange all the papers of your assignment into a file to submit.
- Once you submit your assignment, you will be expected to answer all the questions there INDEPENDENTLY. You may be asked to answer any question of the assignment in class.
- Q1. What is malware? Describe any three types of malwares and explain how they infect systems and how their effects can be minimized.
- Q2. Explain how antivirus and endpoint detection tools help in identifying and preventing malware attacks. What are their limitations?
- Q3. What is a digital signature in the context of cyber-attacks? How can signatures be used to detect known attacks?
- Q4. Explain how Intrusion Detection Systems (IDS) and Intrusion Prevention Systems (IPS) work.

 How do they use attack signatures to function?
- Q5. Describe three different types of security attacks that can occur in different environments (e.g., network, web application, cloud). Explain how each can be detected and prevented.