Ethical Hacking 3

(SPY 2008)

Assignment 2

Submitted By-

Your Name
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Submitted To-

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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.