

Cybersecurity 3

(SPY 2011)

Assignment 2



Submitted By-

Your Name

University Number: **123456**

Submitted To-

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Instructions:

- Draw diagrams wherever relevant. Explain your notations explicitly and clearly.
- An incomplete assignment is NOT acceptable for submission.
- 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 the class.

- Q1. Explain the role of public key infrastructure (PKI) in securing communications.
How does PKI facilitate trust in digital transactions?
- Q2. Discuss the importance of threat intelligence sharing among organizations.
What frameworks and platforms can be used to facilitate this sharing?
- Q3. Identify the unique security challenges posed by Internet of Things (IoT) devices. Propose a strategy to secure IoT deployments in a smart home environment.
- Q4. Analyze a recent cyber security breach from a legal and ethical perspective.
What laws were potentially violated, and what ethical considerations should organizations take into account?
- Q5. Research a recent development in cyber security technology (e.g., AI in threat detection, zero trust architecture). Discuss its potential benefits and challenges in implementation.