Homework Assignment: Chapter 2 – Pervasive Attack Surface and Controls

Questions:

1. What is social engineering, and why is it considered a serious threat in cybersecurity?

2. Compare and contrast phishing, spear phishing, and whaling. Provide an example scenario for each.

3. Explain what a watering hole attack is and why it can be effective.

4. Describe at least two types of physical perimeter defenses and explain how they contribute to overall security.

5. What is the purpose of a Faraday cage, and how can it be used to prevent data leakage?

6. Define and give an example of each of the following: data in transit, data at rest, and data in processing.

7. Why is it important for an organization to classify its data? Provide at least three classification types and describe their recommended handling.

8. What is data sovereignty, and how can it affect an organization's data management practices?

9. Describe one method used to protect sensitive data (e.g., tokenization, data masking, segmentation) and explain how it works.

10. Reflect on the types of human manipulation tactics used in social engineering. Which do you think is the most effective and why?