

**Department of Computer Science**

**Bahria University**

**CSC-114: ICT**

**Semester01 (Fall 2023)**

**ASSIGNMENT 04**

Marks: 05

# NAME:

# CLASS: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Marks Obtained:**

**Instructions.**

* Submit your assignment on LMS
* Use diagrams where appropriate to illustrate your points.
* Your submission should be in a Word document (.docx) format.
* Please submit your assignment through the online portal by the deadline.

**Question 1 CLO3, PLO2, C2**

Imagine you are a newly appointed Network Security Analyst at 'TechWise Solutions', a multinational company. Your company's network has recently experienced a data breach, causing data leakage of sensitive client information. An investigation has revealed that the breach was due to an unsecured wireless network and weak firewall settings.

Do the following tasks and explain your analysis:

* Network Vulnerability Analysis (1 mark): Identify the potential security vulnerabilities in the scenario above. Discuss at least two possible vulnerabilities and their impact on network security.
* Security Measures (1 mark): Suggest appropriate security measures that the company should take to address the identified vulnerabilities. Explain how these measures would improve network security.
* Incident Response Plan (1 mark): Draft an incident response plan to handle such breaches in the future. Your plan should include at least three steps, focusing on rapid detection, containment, and recovery.
* Prevention Strategy (1 mark): Propose a prevention strategy to avoid similar breaches in the future. Your strategy should include a combination of technical, administrative, and physical security controls.
* Reflection (1 mark): Reflect on the importance of network security in a business context. Discuss the potential consequences of not having robust network security measures in place.