

Full Name: \_\_\_\_\_ Gannon Identification Number: \_\_\_\_\_

**CYENG 351: Embedded Secure Networking**  
**Spring 2023, Second Examination**  
**Gannon University (GU)**  
**April 12, 2023**

**Please do not turn the page until you are informed.**

Rules:

- The exam is closed-book, closed-note, closed shared calculator, and closed electronics.
- Please stop promptly at **1:55 PM**.
- There are **20 points** total, distributed **evenly** among **2** questions.

Question	Maximum	Earned
1	10	
2	10	

Advice:

- Read questions carefully. Understand a question before you start writing your answer.
- Write down thoughts and intermediate steps so you can get partial credit. Clearly circle your final answer.
- The questions are not necessarily in order of difficulty. **Skip around.** Make sure you get to all the problems.

Wishing you the best of luck,  
**Dr. Shayan (Sean) Taheri**

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**Question 1. (10 points)** Complete the following items.

- A. Provide a description for the **File Transfer Protocol (FTP)**.
- B. Specify the weaknesses of **FTP**.
- C. Determine the usages of **FTP**.
- D. Explain the **Bounce Attack** using a figure.
- E. Discuss the similarities and the differences between **FTP** and **TFTP**.
- F. Mention different forms of **HTTP Authentication**.

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**Question 1. (Cont.)**

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**Question 2. (10 points)** Complete the following items.

**A.** Describe different aspects of **ZigBee**, including but not limited to its characterization, bandwidth, connectivity, and functionality.

**B.** Specify and draw different topologies of **ZigBee**.

**C.** Determine **the Type of Designs/Architectures** for software/hardware resources that provides robustness, flexibility, and well-defined connectivity. Explain **the design type** using a figure.

**D.** Mention different rules that should be considered for **the design type** connectivity.

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**Question 2. (Cont.)**