Lab Assignment

Imports, Functions and Variables

A screen shot of a computer program

Description automatically generated

A. Impulse Response

* **Problem A.1**

Code:

A computer screen with colorful text

Description automatically generated

Results:

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* **Problem A.2**

Code:

A computer screen with text on it

Description automatically generated

Results:

**A graph with a green line

Description automatically generated**

* **Problem A.3**

Code:

A computer screen with colorful text

Description automatically generated

Results:

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B. Convolution.

* **Problem B.1**

Code:

A computer screen shot of a program code

Description automatically generated

A computer screen shot of a program code

Description automatically generated

Results:

**A screenshot of a computer screen

Description automatically generated**

* **Problem B.2**

Code:

A screen shot of a computer program

Description automatically generated

Results:

**A graph of a function

Description automatically generated with medium confidence**

* **Problem B.3**

Part A:

Code:

A screen shot of a computer program

Description automatically generated

Results:

**A graph of a graph

Description automatically generated with medium confidence**

Part B:

Code:

A screen shot of a computer program

Description automatically generated

Results:

**A screenshot of a graph

Description automatically generated**

Part H:

Code:

A screen shot of a computer program

Description automatically generated

Results:

**A graph of a function

Description automatically generated**

C. System Behavior and Stability.

* **Problem C.1**

Code:

A screen shot of a computer program

Description automatically generated

Results:

A graph of a number of different types of data

Description automatically generated with medium confidence

* **Problem C.2**

Results:

A screenshot of a computer

Description automatically generated

* **Problem C.3**

Code:

A screen shot of a computer code

Description automatically generated

A screenshot of a computer program

Description automatically generated

Results:

h1: **A screenshot of a computer

Description automatically generated**

h2:

A screenshot of a computer

Description automatically generated

h3:

A screenshot of a computer screen

Description automatically generated

h4:

A screenshot of a computer

Description automatically generated

D. Discussion.

* **Problem D.2**

Results: When two signals are convolved, the resulting signal's duration is equal to the sum of the durations of the original functions.