A =

A black background with white text

Description automatically generated

B =



C = 6×6

1 0 0 0 0 0

0 1 0 0 0 0

0 0 1 0 0 0

0 0 0 1 0 0

0 0 0 0 1 0

0 0 0 0 0 1

Controllability\_matrix =

A black screen with white text

Description automatically generated

Controllability\_matrix = 6×6

10-3 ×

0 1.0000 0 -0.1472 0 0.1419

1.0000 0 -0.1472 0 0.1419 0

0 0.0500 0 -0.0319 0 0.0227

0.0500 0 -0.0319 0 0.0227 0

0 0.1000 0 -0.1128 0 0.1249

0.1000 0 -0.1128 0 0.1249 0

Q = 6×6

1 0 0 0 0 0

0 1 0 0 0 0

0 0 1 0 0 0

0 0 0 1 0 0

0 0 0 0 1 0

0 0 0 0 0 1

A graph with blue rectangular bars

Description automatically generated with medium confidence

A graph of a number of blue and white lines

Description automatically generated

K\_matrix = 1×6

1.4142 58.2683 -2.1316 -92.3217 -1.0675 -46.2364

P\_matrix = 6×6

105 ×

0.0004 0.0085 -0.0007 -0.0141 -0.0003 -0.0071

0.0085 0.3496 -0.0128 -0.5827 -0.0064 -0.2914

-0.0007 -0.0128 0.2844 0.0213 -0.0002 0.0106

-0.0141 -0.5827 0.0213 1.5011 0.0107 0.4609

-0.0003 -0.0064 -0.0002 0.0107 0.1377 0.0053

-0.0071 -0.2914 0.0106 0.4609 0.0053 0.3713

EigenValues = 6×1 complex

-0.0001 + 0.7285i

-0.0001 - 0.7285i

-0.0001 + 1.0430i

-0.0001 - 1.0430i

-0.0243 + 0.0243i

-0.0243 - 0.0243i

A graph of a sound wave

Description automatically generated