

X

NPTEL

reviewer2@nptel.iitm.ac.in ▼

Courses » Aircraft Dynamic Stability & Design of Stability Augmentation System

Announcements Course Ask a Question Progress

Unit 9 - Week 8



Course outline

How to access the portal

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

- Lecture 41
Stability Augmentation System
- Lecture 42
Numericals : SAS
- Lecture 43
Numericals: Mode Shapes
- Quiz : Assignment 8
- Solutions for Assignment 8

Assignment 8

The due date for submitting this assignment has passed. **Due on 2016-09-14, 23:59 IST**
As per our records you have not submitted this assignment.

1) Yawing moment equation for an aircraft is given as

1 point

The damping ratio and natural frequency are respectively

- 0.05 and 0.05
- 1.24 and 0.05
- 0.05 and 1.24
- 1.24 and 1.24

No, the answer is incorrect.

Score: 0

Accepted Answers:

0.05 and 1.24

2) For question-1 what will be the feedback gain so that the desired damping ratio is 0.2

2 points

- $|K_1|=0.125$
- $|K_1|=0.575$
- $|K_1|=1.54$
- $|K_1|=0.755$

No, the answer is incorrect.

Score: 0

Accepted Answers:

$|K_1|=0.575$

3) For an aircraft equation of motion for constrained pitching motion is given as

1 point

The value of damping ratio and natural frequency are respectively

- 2.343 and 2.343
- 2.343 and 0.015
- 0.015 and 0.015
- 0.015 and 2.343

No, the answer is incorrect.

Score: 0

Accepted Answers:

0.015 and 2.343

4) For question-3 what will be the feedback gain so that the desired damping ratio is 0.4

2 points

-
-
-
-

No, the answer is incorrect.

Score: 0

Accepted Answers:

5) Short period dynamics is given by

What will be the feedback gains so that aircraft characteristic roots are $-2.5 \pm 3.14i$

-
-
-
-

No, the answer is incorrect.

Score: 0

Accepted Answers:



4 points

◀ Previous Page

End ▶

© 2014 NPTEL - Privacy & Terms - Honor Code - FAQs -

A project of



In association with



Funded by



Powered by

