Assignment 01

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Due on 2018-08-15, 23:59 IST.

1) Positively Cambered airfoil produces: (Leading edge up moment is positive)

- Positive pitching moment about the aerodynamic centre
- Negative pitching moment about the aerodynamic centre
- Negative pitching moment about the centre pressure
- Zero pitching moment about the aerodynamic centre

No, the answer is incorrect.
Score: 0
Accepted Answers:
Negative pitching moment about the aerodynamic centre

2) A wing is made of symmetrical airfoil the pitching moment coefficient at zero-degree angle of attack will be

- Positive
- Zero
- Negative
- Cannot say

No, the answer is incorrect.
Score: 0
Accepted Answers:
Zero

3) The Aspect ratio of airfoil is

- Infinite
- Finite

1 point
4) The Aspect ratio of wing is
- Infinite
- Zero
- Finite & Non Zero
- Option Infinite and Finite & Non Zero are possible

No, the answer is incorrect.
Score: 0
Accepted Answers:
Finite & Non Zero

5) As Aspect ratio of wing increases the lift curve slope will
- Increase
- Decrease
- Remains constant
- Both option Increase & Decrease are possible

No, the answer is incorrect.
Score: 0
Accepted Answers:
Increase

6) To make a flying wing manoeuvrable which of the following requirement must be met
- Centre of gravity should be ahead of aerodynamic centre
- Centre of gravity should be behind of aerodynamic centre
- Chosen Airfoil should be symmetrical
- Chosen Airfoil should be cambered

No, the answer is incorrect.
Score: 0
Accepted Answers:
Centre of gravity should be behind of aerodynamic centre

7) To trim a flying wing at negative angle of attack which of the following arrangement is done
- Centre of gravity should be ahead of aerodynamic centre
- Centre of gravity should be behind of aerodynamic centre
- Chosen Airfoil should be symmetrical
- Chosen Airfoil should be cambered

No, the answer is incorrect.
Score: 0
Accepted Answers:
Chosen Airfoil should be cambered

8) Longitudinal stability of an airplane depends upon
- Tail arm
- Control surface area
- Type of Winglets used in wing tip
9) A negative tail incidence angle setting, as compared to zero tail incidence angle setting, will \textit{1 point} result in

- None of these
- No, the answer is incorrect.

Score: 0

Accepted Answers:
- Tail arm

10) In an aircraft without changing any other dimensions the area of horizontal tail is increased \textit{1 point} by three times. Due to this change the longitudinal stability of aircraft will

- None of these
- No, the answer is incorrect.

Score: 0

Accepted Answers:
- Increase

Score: 0

Accepted Answers:
- Increase