Assignment 03

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

Due on 2020-02-19, 23:59 IST.

1) Data for question No: 1 to 3
The drag polar of an airplane is given by: \( C_D = 0.035 + 0.03C_L^2 \)
If the weight of the airplane is 500 kg, Wing area of airplane is 10 \( m^2 \) and airplane speed during climb is speed of 50 m/s.
Note: Climb angle is 15°

The load factor (\( n=L/W \)) will be?

- \( >1 \)
- \( =0 \)
- \( <1 \)
- \( =0 \)

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

2) The drag coefficient will be?
- 0.0200
- 0.0220
- 0.0270
- 0.0031

No, the answer is incorrect.
Score: 0
Accepted Answers: 0.0079

3) The value of thrust required (in Newton) to perform this climb will be?
- 515.48
- 220.69
- 583.32
- 580.16

No, the answer is incorrect.
Score: 0
Accepted Answers: 580.16

4) To improve the climb performance, which one of the following is the correct combination?
- Higher the weight, higher the drag and higher the thrust
- Lower the weight, lower the drag and lower the thrust
- Higher the weight, lower the drag and higher the thrust
- Lower the weight, lower the drag and higher the thrust

No, the answer is incorrect.
Score: 0
Accepted Answers: Lower the weight, lower the drag and higher the thrust

5) The excess power of the airplane determines?
- Rate of climb performance
- Level-flight performance
- Gliding-flight performance
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers: Rate of climb performance