# Unit 7 - WEEK 06



## Assignment 06

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

**Due on 2020-03-11, 23:59 IST.**

1) DATA FOR QUESTIONS 1 to 4 — ***2 points***

An aircraft weighing 5602.7 kg and area 29.54 sq. m, has landed with flaps fully employed maximum lift coefficient is 2.5. No thrust reversal is used; however, spoilers are employed such that L=0. The spoilers increase the parasite drag by 10 percent. ($C_{D_0} = 0.02$) without spoiler's deflection.

Calculate the touch down velocity $V_{TD}$(assume $V_{TD}$=1.3 $V_{stall}$) at sea level.

- 69.15 m/s
- 34.86 m/s
- 45.32 m/s
- 53.19 m/s

No, the answer is incorrect.
Score: 0

**Accepted Answers:**
*45.32 m/s*

2) Calculate $C_{D_0}$ during landing — ***2 points***

- 0.020
- 0.022
- 0.030
- 0.032

No, the answer is incorrect.
Score: 0

**Accepted Answers:**
*0.022*

3) Calculate drag at $(0.7V_{TD})$ — ***2 points***

- 300.60 N
- 400.60 N
- 500.60 N
- 600.60 N

No, the answer is incorrect.
Score: 0

**Accepted Answers:**
*400.60 N*

4) Calculate the landing ground roll distance ($\mu_r = 0.4$) — ***4 points***

- 356.98 m
- 456.98 m
- 156.98 m
- 256.98 m

No, the answer is incorrect.
Score: 0

**Accepted Answers:**
*256.98 m*