Assignment 01

The due date for submitting this assignment is 2020-09-30, 23:59 IST.

As per our records you have not submitted this assignment.

1) Unmanned Aircraft design process includes?
   - Mission requirement
   - Weight estimation
   - Fabrication
   - All of these
   No, the answer is incorrect
   Score: 3
   Accepted Answers:
   All of these

2) What are the different approaches to validate the design of Unmanned Aircraft?
   - Wind tunnel test
   - Real Flight test
   - Flight test in a virtual environment
   - All of these
   No, the answer is incorrect
   Score: 3
   Accepted Answers:
   All of these

3) Static pressure acts?
   - Normal to flow direction
   - Parallel to flow direction
   - At 90 degrees to flow direction
   - None of these
   No, the answer is incorrect
   Score: 3
   Accepted Answers:
   Normal to flow direction

4) The density ratio at 10 km and 0 km is?
   - 0.28
   - 0.25
   - 0.20
   - 0.34
   No, the answer is incorrect
   Score: 3
   Accepted Answers:
   0.24

5) The Temperature ratio at 13 km and 15 km is?
   - 1.00
   - 0.99
   - 1.10
   - 1.76
   No, the answer is incorrect
   Score: 3
   Accepted Answers:
   0.99

6) The Pressure ratio at 10 km and 0 km is?
   - 1.000
   - 0.495
   - 0.201
   - 0.165
   No, the answer is incorrect
   Score: 3
   Accepted Answers:
   1.00

7) Working fluid for thrust generation for a propeller powered unmanned aircraft is?
   - Ambient air
   - Water
   - Aviation turbine fuel
   - Nonexistent
   No, the answer is incorrect
   Score: 3
   Accepted Answers:
   Ambient air

8) Thrust produced by propeller of unmanned aircraft depends on?
   - Mass flow rate
   - Air density
   - Air temperature
   - All of these
   No, the answer is incorrect
   Score: 3
   Accepted Answers:
   All of these

9) It has been observed that the thin boundary layer is formed when flow passes over an aileron. In this case, what will be the possible types of flow?
   - Ideal flow
   - Viscous flow
   - Laminar flow
   - All of these
   No, the answer is incorrect
   Score: 3
   Accepted Answers:
   Viscous flow

10) Flow is separated mainly because of?
   - Adverse pressure gradient
   - Favorable pressure gradient
   - High velocities of a fluid particles
   - Low velocities of a fluid particles
   No, the answer is incorrect
   Score: 3
   Accepted Answers:
   Adverse pressure gradient