

Aerospace Engineering Fundamentals

Aerospace Engineering · Practice Test · 10 Questions

1. Which of the four forces of flight is responsible for pulling an aircraft toward the Earth?

- A) Lift
- B) Thrust
- C) Drag
- D) Weight

2. What is the primary purpose of the vertical stabiliser located on the tail of an aircraft?

- A) To control pitch
- B) To provide directional stability
- C) To generate lift
- D) To reduce engine noise

3. Which layer of the atmosphere do most commercial jet aircraft fly in to avoid weather disturbances?

- A) Troposphere
- B) Stratosphere
- C) Mesosphere
- D) Thermosphere

4. In rocketry, what is the term for the speed required for an object to break free from Earth's gravitational pull?

- A) Mach speed
- B) Terminal velocity
- C) Escape velocity
- D) Orbital decay

5. What component of a jet engine is responsible for compressing incoming air before it reaches the combustion chamber?

- A) Compressor
- B) Turbine
- C) Nozzle
- D) Propeller

6. Which of Newton's Laws of Motion best explains how a rocket generates thrust by expelling gas in the opposite direction?

- A) First Law
- B) Second Law
- C) Third Law
- D) Law of Universal Gravitation

7. What part of an airplane wing is used to change the camber of the wing to increase lift during takeoff and landing?

- A) Aileron
- B) Flap
- C) Rudder
- D) Fuselage

8. Which gas makes up the majority of the Earth's atmosphere, through which aerospace vehicles must travel?

- A) Oxygen
- B) Carbon Dioxide
- C) Nitrogen
- D) Hydrogen

9. What is the name of the central body of an aircraft that holds the crew, passengers, and cargo?

- A) Empennage
- B) Fuselage
- C) Cowling
- D) Airfoil

10. Which agency is the primary government organisation responsible for the civilian space program in the United States?

- A) ESA
- B) NASA
- C) JAXA
- D) CSA