

Fundamentals of Mechanical Engineering

Mechanical Engineering · Practice Test · 8 Questions

1. What is the unit of measurement for force in the International System of Units (SI)?

- A) Joule
- B) Watt
- C) Newton
- D) Pascal

2. Which simple machine consists of a rigid bar pivoted on a fulcrum?

- A) Lever
- B) Pulley
- C) Screw
- D) Wedge

3. What property of a material describes its ability to return to its original shape after being deformed?

- A) Plasticity
- B) Elasticity
- C) Brittleness
- D) Hardness

4. Which thermodynamic law states that energy cannot be created or destroyed, only transformed?

- A) Zeroth Law
- B) First Law
- C) Second Law
- D) Third Law

5. What is the primary function of a bearing in a mechanical system?

- A) To increase friction
- B) To convert heat to work
- C) To reduce friction between moving parts
- D) To store electrical energy

6. Which type of stress occurs when a material is pulled apart from both ends?

- A) Compression
- B) Torsion
- C) Shear
- D) Tension

7. What do we call the ratio of the output force to the input force in a mechanical system?

- A) Efficiency
- B) Mechanical Advantage
- C) Power Density
- D) Torque

8. Which common device is used to convert rotational motion into linear motion?

- A) Ball bearing
- B) Screw thread
- C) Flywheel
- D) Brake pad