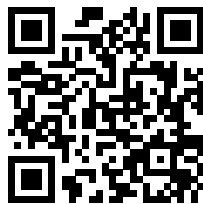




SoulShift - Educational Q&A Platform

General Questions

Practice Questions



Q1. For a beam with a moment of inertia I , what is the relationship between deflection and load?

- A. Directly proportional
- B. Inversely proportional
- C. Independent
- D. Quadratic

Solution: The deflection of a beam is inversely proportional to its moment of inertia (I); as I increases, deflection decreases.

Q2. What is the maximum deflection for a cantilever beam with a point load at the free end?

- A. $PL^3/3EI$
- B. $PL^4/8EI$
- C. $PL^3/48EI$
- D. $PL^2/2EI$

Solution: The maximum deflection (δ) for a cantilever beam with a point load (P) at the free end is given by $\delta = PL^3/3EI$.



