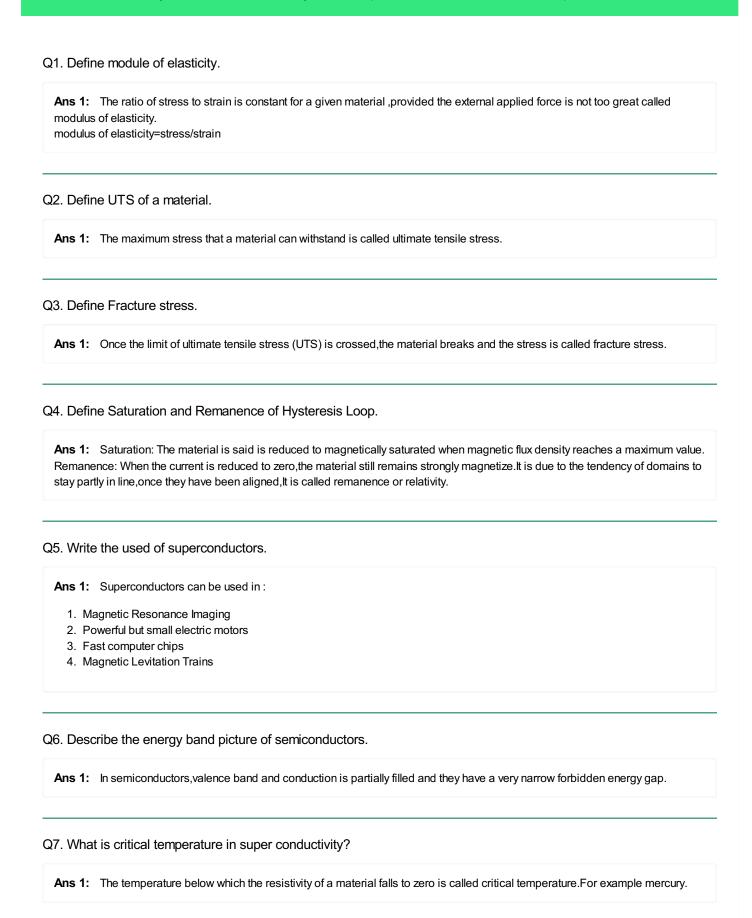


## Physics - ICS Part 2 Physics Chapter 17 Short Questions Preparation



Q8. How can the strain energy be determined from the force extension graph?

**Ans 1:** Strain energy can be determined from the force extension graph according to the following relation Strain energy:  $\frac{1}{2} I_1 F_1$ 

Q9. Describe energy band picture of insulators.

**Ans 1:** Insulators are those materials in which valence electron are bound to very tight to their atoms and are not free. In terms of energy bands, it means that an insulator has:

- An empty conduction band
- · A full valence band
- · A large energy gap

Q10. Distinguished between elasticity and plasticity.

**Ans 1:** Elasticity: In deformed crystalline solid, the atoms return to their equilibrium position after the removal of external force. This ability of the body to return to its original shape is called elasticity.

**Ans 2:** Plasticity: If the stress is increased beyond elastic limit, the specimen becomes permanently deformed. This is called plasticity.