

Answer on Question #44373 – Physics – Other

Ali bends his plastic ruler. what are the effects of the forces on the ruler.

Solution:

When Ali bends a plastic ruler it bends in a specific plane in which the value of flexural rigidity is less i.e. in a plane where its moment of inertia is less. It forms a deflection curve, the upper part goes into compression and the lower part into tension.

Also Bending stresses are developed which oppose the bending of the ruler. This phenomenon is based on the theory of bending of beams under the scope of strength of materials.

