**Q1.** What will be the length of a meter rod appear to a person travelling parallel to the length of the rod at a speed of 0.8c relative to rod?

**Given:-** $l_0$=1.0m ; v=0.8c

**Formula :-** $l = l_0\sqrt{1-\frac{v^2}{c^2}}$

**Solution :-** $l$ = $1.0\sqrt{1-0.8^2}$ =0.6m

**Ans:- The apparent length of the rod while in motion is 0.6m.**