

# EXAMPLE PROBLEM STATEMENT

## Design a Cable stayed or suspension bridge

### Instructions:

1. Minimum free span (Distance between two piers) should be 750 mm and not more than 1200 mm.
2. Minimum span of the bridge should be 1350mm.
3. The deck width may vary between a minimum of 200 mm to a maximum of 250 mm.
4. Height of Bridge should not exceed 1000mm.
5. Clear distance between deck and ground should not be less than 200mm.
6. Other than design for keeping the bridge to stand no other construction is allowed at the base.

### Material provided:

Wood, Thread, pins, adhesive, hammer and saw

\*\*Drill will be available with NIRMAAN team members.

### Scoring and judging criterion:

1. Maximum Load (in Kg) at which the structure fails.-50%
2. Asthetics.-25%
3. Amount of wood used.-20%
4. Time taken to complete the design.-5%

\*\*Decision made by the judges will be final and binding.