## Bridge It!

## **Event Head:** Swaroop, Somashekhar

Use your creativity and brainstorming skills to come up with the most effective way to design and build a bridge with small constraint on materials. Slow and sturdy wins the race.

### About the event:

- The event tests the ability to create a bridge with the given set of rules and parameters.
- It encourages the use of creativity and brainstorming to come up with an effective way to design the bridge.

### Problem statement:

- 1). Use of popsicle sticks (aka ice-cream sticks) and fevicol as the adhesive for the bridge construction. (only materials to be used)
- 2). The bridge dimensions are to be in the range specified below

HEIGHT: 10-15cms

WIDTH: 11-14cms

LENGTH: 55-65cms

- 3). The bridge should not weigh more than 450gms.
- 4). There must at least a width of 7cms and minimum clearance of 9cms for a toy car to be passed.
- 6). The bridge has to carry atleast 4kg of load, which is the minimum qualifying criteria for it to go to 2<sup>nd</sup> round.
- 7). On the day of the event, bridges have to be brought to the venue for testing its loading capabilities.
- 8). Loading will be done at the midspan of the bridge, and a support of 3cms at each end is held for the model and tested.
- 9) No painting or decorating is allowed.

#### General rules for the contest:

- 1). The contest will be held in 1 round.
- 2). Participants should come to venue with their bridges.
- 3). Teams of less than 5 is encouraged.
- 4). No person can be a part of more than one team



Sample image depicting how the testing would be done.

# Judging criteria:

The teams will be judged based on the efficiency score of their bridge

Efficiency score = (maximum load taken by the bridge at breakage)/(weight of the bridge).

Teams Not adhering to rules will be disqualified.