Bridge-O-Mania

Registration fees-Rs.400

Problem Statement

To design and construct the most efficient bridge within the

specifications.

Rules

1. The bridge must be constructed only from Pop-sticks (150 PROVIDED) and adhesives. No other materials may be used.
2. All participants get an equal amount of fevicol in a container.

3. The bridge may not be stained, painted or coated in any fashion with any foreign substance.
4. The adhesive can only be used to join Pop-sticks together; however adhesives cannot be applied on the free surface of the member sticks to increase its strength.
5. The choice of the type of bridge is upon the discretion of participant.
6. At any point in the bridge, the pop-sticks must not be joined in more than three layers.
7. The loading would be done below the bridge using a 5cm x 10cm loading plate-connecting hook system.

    All bridge elements must be made of common wooden craft sticks (standard size: 41/2”x3/8”x 1/12”). Allowed tolerances = +1/16” length, + 1/16” width, and + 1/48” thickness.

8. The plate would rest on the deck while the hook connected to the plate would go through the deck and below where weights would be kept.
9. Prior to testing of the bridge, the dead weight of the bridge is noted down.
10. Failure to adhere to the maximum weight limit of the bridge would result in disqualification.
10. All construction and material requirements will be checked prior to testing. Bridges failing to meet these requirements will be disqualified.
11. The bridge with the highest structural efficiency, E, will be declared the

winner. E= Load supported in kg/ Mass of the bridge in kg.

12. The organizers reserve the rights to change any or all of the above rules as they deem fit. Change in rules, if any will be highlighted on the website and notified to the registered teams.

13. Violation of any the above rules will lead to disqualification.

15. Our general rules are applicable.

Bridge Dimensions

1. The entire bridge must fit within a box of 55cm long, 10” high and 5” wide.

2. Prior to loading, no part of the bridge should extend above the bridge size.

3. The bridge must span a 45 cm gap and fit within the specified clearance envelope. It is recommended that the bridge must be at least 55cm long to avoid falling through the 45cm gap when tested.

4. Bridges shall not be designed to transfer lateral (sideways) load onto the supports.

5. Bridge roadway must be continuous, flat, and level. There should be no gaps between the sticks on the roadway. Traffic should be able to roll across the bridge unimpeded.

6. The bridge must weigh not more than 300gm.

Team Specification

A team may consist of 4 participants. Students from different educational institutes can form a team.

Certificate Policy

Certificate of excellence will be awarded to the top 2 winners.

Certificates of Participation will be given to all the participants, but not to the teams which get disqualified due to disobeying any of the competition

rules.