#### **Mission Objective**

#### To water a plant using a Rube Goldberg Machine!!

The starting step and the final step will be fixed for all the machines.

- Starting Step: Drop water from a height which starts off the machine.
- **Final Step**: Watering a plant (in a pot) symbolizing GO GREEN movement.

### **Event Format**

The competition will be held in two rounds:

- For the first round, the teams have to submit an abstract for their machine latest by **15 October 2012**. An abstract is basically a copy of a step-by-step description of their machine. Diagrams and pictures have to be included in this description along with the typed information. If any team fails to submit the copy of the abstract then they will automatically be disqualified from the event. **The Abstract has to be submitted at abinitio@techsrijan.org**
- In the second round the short listed teams will be invited to present their machine in techSRIJAN 2012 at MMMEC and compete with the other teams.

### **Materials**

- Each team will be provided with some of the common requirements for the rube machine and other facilities available in the college workshop.
- However, it is strongly advised to all the teams to carry any special tools, chemicals, etc. they will need for their rube, as every rube has different requirements.
- We will not be responsible in any manner for the availability of the materials required by the teams.

# **Judging Criteria**

On the basis of the abstract submitted by the team, the short listing for the first round is going to be done. The judging criteria is as follows -

- Credits for number of total steps Each step after the 15<sup>th</sup> step gives you a credit of +2
- For the grading of an individual step Each step will be graded out of 10. It will comprise the innovation and complexity of the steps.
- **Synchronization** of any 2 (or greater than 2) parallel steps to trigger a new step can earn you extra credits depending on the complexity and feasibility.
- Use of very common steps won't earn you much credit.

The judging criteria for the second round will be disclosed to the shortlisted teams only at the venue after the start of techSRIJAN 2012.

## **Machine Specifications**

- The number of members in a team is restricted to **five**.
- The machine must complete the task as described in the challenge.
- The machine must be no larger than 12ft by 12ft and 8 ft height.
- The machine must have a minimum of fifteen (15) steps. There is no maximum number of steps.
- A step in the machine should be considered a transfer in energy from one action to another action. Identical transfers of energy in secession should be considered one step. For example, a set of dominos falling into each other should be considered one step.
- The machine must take no more than six (6) minutes per run.
- The machine will have a 25 minute reset time if they go for more than one run.
- Only two team members may interact with the machine once the evaluation has begun. This includes resetting the machine.
- No corporate logos or names may be displayed on the machines.
- The machine must not imply profane, indecent or lewd expressions.
- Any loose or flying objects must remain within the set boundaries of the machine.
- You are not allowed to use any electronic/electrical device requiring more than 12 volt DC supply.
- No power points would be supplied. However batteries may be used, which have to be arranged by the team themselves.
- No flames may be used on the machine.
- No hazardous materials or explosives can be used on the machine.
- Any destructive action against another machine is grounds for disqualification

## Arena

A picture of the actual arena can be seen here.

- \* All the 4 sides of the arena will be open for the judges.
- \* The teams are provided with chairs and tables will be provided whose dimension is shown.
- \* The machine is allowed to be in contact with the wall only at ONE instance. The area of the wall in touch with the machine is limited to  $(15x10 \text{ cm}^2)$



## **Contacts**

For any queries contact any of the event coordinators or mail us at  ${\bf abinitio@techsrijan.org}$ 

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