

EVENT: GOLDBERG CHALLENGE

INTRODUCTION:

This event allows participants to think out of the box and bring out their creativity to design a Rube Goldberg machine – a Domino effect-based machine that performs a simple task in an indirect, overly complicated yet sequential manner. The event tests the participants' ability to construct and connect mechanisms in the most sophisticated way to leave the judges amazed with their creativity.

EVENT FORMAT:

- The teams will be provided with 2 problem statements.
- Out of these, the teams must attempt to build a working Rube Goldberg machine solving any one problem statement of their choice.
- The machine must have a minimum of 15 steps. There is no maximum number of steps. The running time for the machine should not exceed five (5) minutes.
- The problem statements will be provided to the teams on the day of commencement of the event, i.e., **15th January 2022**.
- They must submit a video of the actual working Rube machine constructed by them that satisfies the problem statement. Teams should also add a short writeup explaining details about the machine, materials used (along with their cost), specifications of items, etc.
- The length of the video should not exceed ten (10) minutes. Participants can also explain the idea and thought process behind the machine they have constructed in the video.
- The deadline for submitting the video is **28th January 2022** (includes the time utilized to make the machine, write the description about the machine's specifications, and compile and submit the working video.)

RULES AND REGULATIONS:

- Individual participants or teams with a maximum of 3 members can participate in the event.
- If the Rube Goldberg machine becomes standstill at some point, it can be triggered manually at that point to continue the operation of the machine. The participants can do this a maximum of two times.
- The total cost of all the items used should not exceed Rs. 2000.
- No hazardous materials or explosives can be used on the machine.
- No flames should be used on the machine.
- A step will be counted as any action or a series of similar action which are a part of your Rube Goldberg Mechanism. Do not count similar steps as many-For example-In a Dominoes-different objects will initiate the fall of each other but it will be counted as one step only. It is expected that each step will initiate the next step (until it is not a termination of some branch steps).
- Participants should upload the videos and writeup (in document format) on google drive and send the link through mail (competitions.wissenaire@gmail.com)

JUDGING CRITERIA:

- Complexity and creativity in the idea and design.
- Variety of items used for the mechanism.
- If the machine works or not (criterion for direct elimination).
- Efficient and Effective usage of the items (extra points for unexpected use of items that impresses judges).
- Extra points will be given for a greater number of parallel paths used.
- Advantageous application of physics concepts.

CONTACT DETAILS:

Shikhar Agrawal

Event Coordinator

Wisenaire'22

Ph no: 8599812216

Email: 20ec01013@iitbbs.ac.in