

# PROBLEM STATEMENT

**Objective:** Design and construct a glider using household items.

## Constraints:

- The glider must have a wingspan less than 60 cm.
- There must not be dynamic parts mounted on the glider.
- The glider cannot be released higher than 9 feet off the ground.
- The Students are to “launch” their Glider Planes by hand from a stationary position on the ground.

## Submission:

- Prepare a video depicting the max. range of flight

The video must capture the entire flight of the Glider Plane at all times. At no point in the video can the Paper Glider Plane escape the frame of the video. Teams must plan their flight tests and video shots carefully in order to ensure the Plane does not leave the video frame. And flight test video must be shot in **ONE CONTINUOUS VIDEO – NO EDITING!**

- Prepare a report comprising of the following topics:
  - Showcase your approach towards the design of the glider.
  - List out all materials used to fabricate the glider.
  - Include 3 photos of the glider from three views.(front, top and either side)
  - Include photos clearly showing that the glider wingspan is following constraints with the help of the ruler scale. (like if your wingspan is 60 cm then you can show one side of wing by 30 cm ruler scale)
  - Also, include your contact details in the report.(Name, Roll No. (U20XXXXX), Phone No.) on the front page of it.
- The report should follow the listed instructions:
  - Maximum 4 pages are allowed.
  - Fonts should have the size of **12** and should be **Times New Roman**. (title can have a size of 16).
- Upload the video and report file on the below-provided Google form link:  
[https://youtu.be/\\_CQsuV45SKY](https://youtu.be/_CQsuV45SKY)

**Note:**

- Videos and Photos must be in good quality.
- You can refer to the provided ppt.
- Scoring will be based on design, report, and time of flight.
- The jury's decision will be final, unbiased, and unquestionable.