Format of the Competition

This competition requires the participants to design and fabricate a package dropping mechanism, capable of dropping a cubical package weighing about 1.5kg, from a height of about 5 m using a rope or string and a clipper mechanism to which the package is hooked.

Design Constraints

- **The total weight of the whole mechanism must not exceed 0.7 kg(without batteries) and lesser weight would lead to higher score.**
- **The mechanism can be controlled manually (wired/wireless) but the clipper must have no wires attached to it for releasing the package, also it must have its separate batteries.**
- **The size of the package used would be 15x15x15 weighing 1.5 kg along with the hook to attach the clipper.**
- **The rope along with the clipper needs to be rolled back to the dropping mechanism after releasing the package.**
- **The clipper (to which the package is hooked) must communicate with the delivery mechanism using wireless communication for releasing the package.**
- **The dimension constraints are:**
  - **Length < 20cm**
  - **Breadth < 10cm**
  - **Height < 10cm**
- **Lesser dimensions would lead to higher score.**
- **Watch this demo video : https://youtu.be/MSCNirIIosI (Just the delivery mechanism)**
- **The package dropping should be smooth and the time taken for drop must be greater than 4 seconds.**

Competitive Parameters	Max Score
Weight*	30
Length*	20
Breadth*	20
Height*	20
Time taken to complete the delivery*	30
Weight handling*	20
Overall working performance	40
Clipper mechanism	70
Rolling back	40
Rolling down	50
Package dropping*	50
Control	50

***These parameters will only be evaluated if the mechanism is found to be working as expected to avoid any kind of discrepancies.**