HYDRO-ROCKETRY

Student: "*Sir, do rockets run only on combustible fuels?*"

Dr. Rocketo: "*A big no... Do you know the power of **compressed air** and **water**?*"

Student: "*Kidding me...On compressed air! Water! What? How?*"

Dr. Rocketo: *"Be a part of **hydro-rocketry** and quench your thirst of curiosity."*

Student: *"Sounds exciting. But what is this hydro-rocketry?"*

Dr. Rocketo: ***"HYDRO-ROCKETRY is an amateur rocketry competition conducted under ASME NIT SILCHAR chapter where you will build your own rockets and compete with others. This event is to create interest in rocketry among the young engineers and encourage them to share their innovative ideas in this exciting field of engineering.***
The competition expects the participants to showcase their innovative ideas and knowledge and how they can apply the same on this platform."

Student: *"Great. Can anyone participate?"*

Dr. Rocketo: *"Anyone can participate **irrespective of** one's **semester** or **branch** or **knowledge**. What truly matters is one's **interest**. Rest will be taken care of by the organizers."*

Student: *"Please provide the **details of the competition**."*

Dr. Rocketo: "*Here you have...*

PROBLEM STATEMENT:

*The participants are required to build a **single stage amateur rocket** which runs on water*.*
*The rockets will be then be launched from a launch pad** and competed.*

RULES:

*(1) The team of participants may consist of **3 to 5 members**.*
*(2) The **size** of the rocket **should not exceed** more than a **specific height**. ****
*(3) The **propellant** of the rocket will consist of **water** and **air** only.*
*(4) Rockets that **fail to launch** (**explodes on launch pad** or **fails to launch to a minimum height**) will be disqualified.*
*(5) Rockets considered **too dangerous to launch** by the organizers **will be disqualified** and the decision of the judges will be **final**.*
*(6) The participants can include a **parachute recovery system** in their rockets.*

JUDGING CRITERIA:

*The rockets will be launched **vertically** and the **time of flight** of the rocket will be recorded by 3 judges. The **average** of all the readings will be taken into consideration. The rocket with the **longest time of flight** will be the winner. The first 3 teams with longest time of flight will be awarded 1st, 2nd and 3rd prize accordingly."*

Student: *"Eager to participate sir."*

Dr. Rocketo: *"Do come along with your friends."*

**Details will be provided by the organizers. Not to worry.*

*** Launch pad will be provided by the organizers. You only need to make a rocket.*

**** There is no specific height but capacity of water fuel tank (bottle) shouldn't be more than 2 liters. Moreover, amount of pressure and water to be maintained will be decided by the team, although there would be limiting pressure ensured for safety (to avoid explosion).*

Organizers:

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