



Biomimicry



CEE

Centre for Environment Education

Our nature is well balanced and maintained. Every event or process occurs to balance each other. It is said that “Nature is the best Teacher” Our ancestors saw the birds flying, learnt from it that resulted in the Airplane. We have learnt a lot of things, still learning and there are a lot of mysteries we still don’t know or couldn’t solve. You have to choose one of the problems and come up with most feasible solution of the following problems.

- € **Urban Transport** - Prepare a model for urban transport (any city) based on the triple bottom line approach. Enough emphasis should be laid on the safety aspect as well. Use of data would be an added advantage, which would help calculate impact of the new model over the existing one.
- € **Water Woes** – Design a sustainable water consumption manual for schools and educational institutes. The manual should be based on an institute’s individual water requirements and consumption. The emphasis should be laid on how the water use can be regulated without affecting the consumption. Prepare an outcome document.
- € **Machine Learning** – Application of machine learning to solve long term environmental issues (Example – Ozone layer depletion, Pollution, climate change etc.). One good example of such is carbon footprint google chrome extension. The solution should be realistic and it should integrate with the current system.
- € **Use of Waste material** – Suggest a use of waste material which is found in abundance but is not being used to its full potential. There are a lot of examples like styrofoam, artificial leather etc. which are found in extremely high quantity but are not used. Suggest engineering applications of the same which can be beneficial in solving the problem.



First Round:

- a) Paper submission on selected topic before given deadline.
- b) Paper to be submitted to submissions@ktj.in
- c) Maximum word of the paper will be 1300.

Second Round:

- a) Second round will be presentation of your paper.
- b) Maximum presentation time will be 12 minutes.

Rules and Regulations:

- a) You have to work on only one topic of the four.
- b) Maximum team size will be 4.
- c) All team member should be present during presentation.
- d) You will be judged based on Paper and Presentation.

Judging Criteria:

- a) Innovativeness, creativity and closeness in adaption of the nature patterns.
- b) Feasibility of the Idea.
- c) Presentation of the Idea.
- d) Environment adaptivity

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