





Engineering Today-2019

Department of Mechanical Engineering(Mech Pulse)

ME1. Robo Race

- 1. Robot will be provided for the event if needed or else you can bring your ownrobot which should satisfy below mention rules.
- 2. The ROBO should fit in the dimensions 30cm x 30cm.
- 3. The ROBO should be controlled by wireless or wired mechanism throughout the race.
- 4. The ROBO must not be made of READY-MADE materials, if it is so ROBO will be disqualified.
- 5. The weight of ROBO should not exceed than 3kg.
- 6. Length of the wires must be sufficient long to cover the area.
- 7. The ROBO must be powered electrically only, use of IC engine is not allowed.
- 8. Battery voltage: Maximum allowed is 24V & 2A.
- 9. Participants cannot bring their own power supply units.
- 10. The Team with minimum time will reaches to the next round.
- 11. In case of TIE, a common task would be given on the spot to both the teams & the winner would be decided on the basis of best timing in the that task.
- 12. The competition is best on time trial systems.
- Team will be provided with 10 hand touches & after 10 hand touches team will be disqualified.
- 14. Hand touches will be allowed with a penalty of 10 seconds each.
- 15. Team will be provided with 2 skips and after 2 skips team will be disqualified
- 16. Skip will be allowed with a penalty of 30 seconds each.
- 17. Teams with top timings will be selected for the final round.
- 18. The ROBO are not allowed to leave any loose parts on any part of area. Any ROBO disintegrating during the RACE will be disqualified. If there is need of reparation of







the ROBO due to certain reasons, then20mins will be provided after that time span team will be disqualified.

19. Judges decision shall be treated as final.

ME2. Cad War

Round 1: 3D Modeling using ProE Wildfire 5.0 (Part Modeling) Round 2: 3D Modeling & Assembly Using ProE Wildfire 5.0

ME3. Hydro Rocket

- 1. Number of rounds will be decided based on the number of entries.
- 2. The rocket should be strictly made around a PET bottle of up to 2 liters' capacity (For e.g. bottle of any aerated drink. Keep in mind the size of the bottle opening should be around that of a standard 2 lit. Coca Cola bottle). Only the use of water without any contaminants such as soda will be permitted. Don't use Maaza or Bisleri bottles as their tail ends do not have standard size.
- 3. You will have to design and build the rocket at home however you wish. Please note that you will have to bring your own material for repairing your rocket at the event (to the original design)
- 4. The launcher, provided by us, will consist of an air pump with variable angle and direction of launch. The cork will be compatible only to the above mentioned bottle sizes.
- 5. The distance will be measured from the point of launch to the first point of impact.
- 6. Each team will be given 3 successive chances in the first round. Best of the three distances will be considered as the final score for that round. The number of teams advancing to the next round will depend on the number of entries.
- 7. Rules for the successive rounds will be revealed at the day of the event.
- 8. At the time of launch, each competitor may adjust the volume of water, air pressure, launch angle and launch direction. There is no limit on water volume but air pressure must not exceed 80 psi (5.516 bars).







ME4.Model Making

- 1. Problem statement will be given on the spot of the event.
- 2. Raw material for model will be provided (e.g. Card board Sheet, glue). Extra material will not be provided to any team.
- 3. Participants must bring cutting, measuring and drawing instruments.
- 4. Use of Mobile is strictly prohibited and will result in disqualification.
- 5. Decision of judges will be final and binding to all participants.

ME5. Tool Master

- 1. <u>All required material will be provided</u>.
- 2. Round 2 is in Question Ansformat .
- 3. Audience shall not give any hints or clues to the competitors.
 - <u>Round1: Puzzle Round</u>
 - <u>Round 2 Visual Round</u>
 - o Sub Round 1. Buzzer Round
 - Sub Round 2. Rapid Fire
 - <u>Round 3; Final Round</u>.

✤ General Rules

- 1. Judges decision will be final
- 2. Member of one team can be from different colleges.
- 3. Participants should be present 30 minutes prior to commencement of event.
- 4. Participants should carry their own college ID cards and Receipt with them on the day of event.
- 5. You should maintain the college decorum.
- 6. Any mess with volunteer/event co-coordinator will be resulted in disqualification.
- 7. If there is any change in above rules, then that will be told to you before the start of the event.







Event Name	Max. Participants	Team Entry Fee	Coordinators
ME1. Roborace	4 (per team)	Rs. 200	MillindGite -7066071237
ME2. Cadwar	2 (per team)	Rs. 100	ShubhamAwachar - 8149389336
ME3. Hydro Mocket	2 (per team)	Rs. 100	HrishikeshBangar – 8605893357
ME4. Model Making	2 (per team)	Rs. 200	Ganesh Gunaki – 7875921960
ME5. Tool Master	2 (per team)	Rs. 100	HimanshuJaiswal - 9637450849

***** General Secretaries (Mechanical Department):

YogeshJagdale: 9146419377

ArjunPhirke:9096000205