ROBORACE

Max. No. Of participants: 4
Registration Fees: 300/-
(and 50/- extra for each member)
No. of Rounds: 3

Introduction:
The machine (bot) should navigate the track in minimum possible time by clearing all obstacles and checkpoints.

General Rules:
· There will be 3 rounds. Two elimination rounds followed by a final round.
· The teams are required to complete the track in minimum possible time. The team will be given two runs in each elimination round. The best score of the two runs will be considered.
· Teams selected from the second elimination round will qualify for the final round.
· At the start of the run, the machines will be placed behind the starting line.
· The time will start as soon as the front edge of the bot crosses the line.
· There will be four checkpoints in the track. The team has to clear all the Check points before reaching the finish line.
· A total of 3 restarts will be given to the team during the run. If a team opts for a restart, then the bot will be restarted by placing it at the previously completed checkpoint.
· No penalty will be awarded for a restart. During a restart, the team cannot make any hardware changes or repairs to their bot. Moreover, the time won't be
paused during the restart.
· In the final round, if all the teams are unable to complete the task in the stipulated time, then the team that reaches the farthest wins.

Miscellaneous:
· Any team that is not ready at the time specified will be eliminated from the
Competition automatically.

· The bots will be checked for their safety before the run and prohibited from use if found unsafe for other participants and spectators.
· Organizers' decision shall be treated as final and binding on all.
· The organizers reserve the right to change any or all of the above rules as
they deem fit.
· Change in rules, if any, will be highlighted on the website and notified to the registered participants.
· In case of ties during elimination round, a re-run will be given to the teams.
· The organizing team members will neither be held responsible nor be liable for any incidents and / or accidents caused by participating
teams and/or their equipment.

Bot Specifications:
· Power supply will be provided to the team at the time of event for its Machines.
· The potential difference between any two points of the machines must not exceed 24 VDC and 6A of current.
· The machine can be either wired or wireless.
· The bot dimensions must not exceed 28cm*28cm*28cm.
· In case the machine is using a non-electric power supply, kindly get it approved from the organizers beforehand via email. Organizers are not responsible for inconvenience if approval is not sought.

TECHNICAL KNOCKOUT

Max. number of participants: 4

Registration Fees: 300 for a team of two and 50 for each extra member (Tentative).

No. of rounds: 3

Description:

If you are well updated with things and events happening around in the Technical world, roll in for this event and test your own reach!
Explore your skills in electrical and entc subjects with this different and fun version of a Treasure Hunt.

Rules:

Students can participate in a group of max 4 people. Pairs are also allowed.

There will be three rounds conducted for this event which are specified as follows:

- **ROUND 1:**
In this round, a rapid fire comprising of ten questions will be asked to the participants. The questions will be based on general knowledge related to technology and gadget world.

Points will be awarded for each correct answer.

- **ROUND 2:**
The qualifying teams will be given hints to find the components that will be hidden across the campus.

The teams will be awarded points based on how quickly they find all the components.

- **ROUND 3:**

For this particular round, the qualifying teams will be told to build a circuit using the components they have found.

They have to get the desired output for the same and accordingly points will be given.

The team scoring the highest number of points will be declared as the winner at the end of the final round.

DRONE RACE

Max. No. Of participants: 1
No. of Rounds: As per number of pilots

Introduction:

Pilots from all over the nation will be arriving with custom built racing drones to fly as fast as they can in order to take the prizes home.

Event Format:

- **Elimination Round:** Each pilot will be given multiple rounds (to be decided as per number of pilots) on the track in order to achieve best timing.
  The pilots to complete the laps a fast as possible will be selected for the final round and the rest will be eliminated.

- **Final Round:** The qualifying pilots have to compete amongst themselves and the ones with the fastest flying drones will be declared as winners.

Rules for this event:

- All aircraft(includingbackups) must be presented at a predetermined time forscrutineering byrace officials. Aircraft must comply with all safety, regulatory and race regulations before being allowed to fly.
- All frames must be of solid construction and all components must be securely   attached
  (Suitability for racing will be done during scrutineering).
- All aircraft must have a 3-pin servo connector wired to a 5V source to facilitate
  powering of a race timing transponder. The Transponder will be pro vided before races to facilitate race timing if required.
- No steel or full carbon fibre propellers allowed, composite or ABS plastic props only.
- Radio/Flight controller Failsafe must be set and demonstrated to race   officials
  during scrutineering. When triggered the failsafe MUST be set to stop the propellers from spinning.

Decisions made by the Race Official are **final.**

IDEATE-TOPIC PRESENTATION

Max. No. of participants: 2-3

Introduction:
Any specified topic. For example **SMART CITY.**

Event Format:
Round 1 (Abstract proposal):

● The primary round consists of sending your abstracts to the mail to team Texephyr.
● Abstract should be of 5-6 pages.

● The registration for this round is Rs 100.
● The subjects should be confined and restricted to the domains given hereof:
1. **IOT for smart cities**
2. **Changing Currents which mean new inventions in the field of Engineering and their impact.**
● The abstract should not be of more than 400 words.
● The winners will be decided on the basis of uniqueness, innovativeness and creativeness of ideas, proper presentation, overall effect, practical possibility of model etc.

Round 2 (Presentation Round 1):
● Texephyr will send you email once you clear round 1 of abstract proposal.
● You have to register and pay for second round, which will be held in MIT campus.
● You have to present a PPT demonstrating your concept in detail.
● **We DON'T expect** from you to present the working model as this is related to idea only.
● The time limit for presentation is 7:30 minutes.
● Remember this is elimination round, you will be judged, cross questioned by expertise and faculties from the domain.
● The winners will be decided on the basis of proper presentation of ideas, overall effect, practical possibility of model, connection with the theme.

Round 3 (Winners selection):

- Texephyr will contact you once you clear round 2.
- You will be cross questioned and judged by a market expertise, faculty and a panel.
- Winners will be selected from this round.
- The winners will be decided on the basis of implementation, plans, future scope of ideas, your answers to the expertise.

Rules:

- This event is open for all engineering students.
- The decision of the judges would be final and binding.
- Participants should only be from recognized educational institutes/universities.
- Projector facility will be provided for round 2 by us.
- Participants have to bring their College ID cards during reporting.
- Time slots will be given and participants are expected to follow it strictly.
- Participants are expected to give their correct contact details, so as to inform them about the results.
  Rules may be changed without prior intimation. Participants are requested to check the TEXEPHYR'19 website regularly for updates.

LINE TRACER

Max. No. Of participants: 3
No. of Rounds: 3

Introduction:
The objective of this contest is for a robot to follow a black line on a white background, without losing the line. The robot to complete the course in the shortest period of time while accurately tracking the course line from start to finish wins.

- **Round 1(Elimination round 1)-**
  Each team will be given a time span of 5 minutes to complete the course. Scores will be given on the basis of the time taken by the bots to reach the finish line.
- **Round 2(Elimination round 2)-**
  Each team will be given a time span of 5 minutes to complete the course. Scores will be given on the basis of the time taken by the bots to reach the finish line.
- A robot that cannot complete the course in the allotted time shall be disqualified.
- The team will be given two runs in the elimination rounds. The best score of the two runs will be considered.
- The teams having the top scores in the elimination rounds will qualify for the final round.

- **Final round-**
The qualifying teams will be competing against each other. Team reaching the finish line in the least time will be announced as the winner.

 Rules:
- Time is measured from the time the robot crosses the starting line until the time it crosses the finish line. A robot is deemed to have crossed the line when the forward most wheel, track, or leg of the robot contacts or crosses over the line.

- The recorded time will be final. Recorded times will not be revealed to their respective teams.
- Once the participating team begins the round, no alteration of their bot is permitted.
- Arena Edges: A robot that wanders off of the arena surface will be disqualified A robot shall be deemed to have left the arena when any wheel, leg, or track has moved completely off the arena surface. The teams are required to complete the track in minimum possible time.The team will be given two runs in the elimination round. The best score of the two runs will be considered.
- Preparatory time of 5 minutes would be given to the contestants before .Start of the first 2 rounds.
- In case of deviation from the track, the team has to continue the race from previous check point and maximum of 3 attempts are given in the whole run.
- Track Size: The width of the black line will be 3cm.
- The participants should ensure that room lighting, photography etc. does not affect the functioning of sensors.
- Any team that is not ready at the time specified will be removed from the competition automatically. Each team has to report at least 15 minutes before the event starts.
- The teams must not damage the opponent's bot or track in any way. Judges reserve the right to disqualify any team indulging in negative controlling & misbehavior.
- Maximum voltage batteries allowed is of 15V.Participants should bring their own power supply/Batteries.
- A maximum of 5 IR pairs are permitted.
- The bots will be checked for their safety before the run and prohibited from use if found unsafe for other participants and spectators.
- Organizers' decision shall be treated as final and binding on all.
- Participating teams are responsible for the safety of their robots and are liable for any accidents caused by their team members or their robots.
- The organizing team members will neither be held responsible nor be liable for any incidents and / or accidents caused by participating teams and/or their equipment.
- The organizers reserve the right to change any or all of the above rules as they deem fit.

- Change in rules, if any, will be highlighted on the website and notified to the registered participants. In case of ties during elimination round, a re-run will be given to the teams.

BE PROJECT

Max. No. Of participants: 3
Registration Fees: 200/-
 (50/- for extra member)
No. of Rounds: 2

Introduction:
For all final year students, Texephyr'19 provides you a platform to demonstrate your talent. The event has received an overwhelming response in the past few years with students from different colleges enthusiastically being a part of it. The contest, being judged by highly qualified faculty members and industrial experts, provides hands-on experience for industrial projects and gives students a rare chance for open interaction with industrial expertise.

Rules:
· This event is for students from E &TC, ETX, Computer and Mechanical branches only.
· Computers and Power Supply would be provided by us.
· Any other equipment/prerequisite must be borne by the participants.
· The decision of the judges would be final and binding.
· Participants should only be from recognized educational institutes/universities.
· Participants have to bring their College ID cards and the receipt of registration during reporting.
· Time slots will be given and participants are expected to follow it strictly.
· Participants are expected to give their correct contact details, so as to inform them about the results.
· Details of the round will be disclosed at the time of event.
· Rules may be changed without prior intimation. Participants are requested
to check the TEXEPHYR website regularly for updates

TE PROJECT

Max. No. Of participants: 3
Registration Fees: 200/-
 (50/- for extra member)
No. of Rounds: 2

Description:
For all third year students, Texephyr'18 provides you a platform to Demonstrate your talent. The competition aims at bringing out the 'techie' in you. The judges would be eminent faculty members and industry experts from various reputed institutions, providing a rare chance for students to interact with industry experts from their fields. So grab this excellent opportunity to nurture and enhance your talent!

Rules:
· This event is for students from E &TC, ETX, Computer and IT branches only.
· Computers and Power Supply will be provided by us.
· Any other equipment/prerequisite must be borne by the participants.
· The decision of the judges would be final and binding.

TECHNODUMB

Max. number of participants: 4

No. of rounds: 2

Registration Fees: 200/-

Description:

This event is a 'Technical' version of Dumb charades. Items/Objects/Things to be guessed are strictly supposed to be engineering products or related to engineering.

For example: Resistor, cathode ray tube, microprocessor. etc

Rules:

There will be two rounds in this event.

● **Elimination Round:** In this round, each team will have to send forward ONE member to pick-up a chit and read the contents.
The same member, then, will have to enact the name of his clue to the rest of the team.

Each team will be given 90 secs to guess the object of the chit.

The teams which are able to do so in the given time will be qualified for the next round.

● **Final Round:** This round will have the same rules as the previous one and declaration of the winning team will be at the sole discretion of the organisers.

➢ **The game shall follow the tracks of the original game of dumb charades.**
➢ **Teams are allowed to designate symbols like a simple thumbs up or thumbs down but they CANNOT use methods to signal specific letters of the alphabet.**

ELECTROCUTION

Max. number of participants: 2

No. of rounds: 3

Registration Fees: 150.

Description:

Ever dreamt of being bombarded by a stream of resistors, inductors and capacitors? If yes, then it's your time to potray your talents and show us what these elements are capable of. Practical knowledge combined with what you learned within the walls of the classroom is what you need to attain the ultimate glory.

Rules:

There will be three rounds in this event.

- **Round One:** This round comprises of an aptitude exam testing the basic electrical and electronic knowledge. In this round, judging will be based on the number of correct answers.

- **Round Two:** The participants will be given a story where every character in the story will be described with respect to the characteristics of electrical components. The participant has to identify what these characters correspond to in electrical elements and connect the identified elements in a particular sequence as mentioned, on a bread board. For this round, judging will be based on number of identified elements and how close the obtained output is to the desired criteria.

- **Round Three:** The participants will be provided with a complex circuit that has 20-25 elements connected. The participant has to identify the fault in the circuit and suggest possible corrections. Judging for the last round will be based on the identification of faults and the appropriate solutions.

Decision of the judges will be final and binding to all.