Rules For Line Following Robot

The Robot

- 1. The robot should be fully autonomous and should not have any human interference.
- 2. Maximum measures of the robot should be 30 x 30 x 30 cm and the maximum weight should be 5 kg.
- 3. Robot must not damage the arena and not poses danger to other participants and the spectators.
- 4. Using voltages greater than 24 Volts in robot is prohibited.
- 5. Robot must have start and stop button(s).
- 6. Robot must not contain any flammable or hazardous material other then battery.
- 7. Except for the battery pack, the handler shall not make any addition, removal, replacement or change to the hardware of the robot during the contest.
- 8. The robot must be battery-powered.
- 9. Power sources that are considered dangerous or unsuitable by the contest Officials shall not be permitted.

Examination of Robots

- 1. It is mandatory for all participating teams to get their robots examined by judges and organizers before the start of competition at allotted time slots.
- 2. After Examination approved robots shall be allotted with a sticker. No robot shall be allowed to run in arena without the sticker.

Duration and timings

- 1. The maximum time allowed for round 1 would be 2 minutes; no extra time shall be allowed to robots what so ever.
- 2. The maximum time allowed for round 2 would be 5 minutes; no extra time shall be allowed to robots what so ever.
- 3. 2 minutes will be given for the team to setup the robot on the arena.
- 4. Each team should be present at the arena venue at their allocated time. Failure to do so will result in disqualification

Rounds and Retries:

- 1. There would be total of three rounds in this event.
- 2. In 1st round you have to complete the track to qualify for 2nd round. It is an elimination round.
- 3. 2nd round is also an elimination round. 50% of the top scoring teams will qualify to the next round.
- 4. The 3rd round (may be divided into quarter, semi and final round) a race between two robots. The time limit only two minutes. The robot completes the task or leading the track will be declared as winner.
- 5. In 1st and 2nd round the team can call for a maximum of 3 restarts at any point in the round for any reason keeping in mind the time limit of 3 minutes in round 2 which will keep running including two minutes of calibration time.
- 6. In case of calling restart the scores will be reset and the team has to start from the starting point.

Check points:

- 1. In each round, each map shall have different checkpoints.
- 2. All check point shall have same score points in each round.

Point Scoring:

- 1. After crossing each check point teams will get 20 points in 2nd round.
- 2. After completing the map you will get 10 points in 2nd round.
- 3. After completing the map with the shortest time you will get 10 bonus points in each of the three rounds.
- 4. After completing the map with shortest path you will get 20 bonus points in each of the three rounds.

Test run for Robot:

1. Contestants will be given maximum 2 minutes to calibrate their robot/sensors on the actual arena/game field.

The Contest Judges Rights:

- 1. The Contest judges may stop any robot at any time if they feel that it is performing, or is about to perform, any action that is dangerous or hazardous to people or equipment.
- 2. In all matters of interpreting the rules before and during the Contest and in any issues not covered by these rules, the decisions of the Contest Judging Committee will be final.

Disqualification:

- 1. If any robot founded attempting to damage the game field.
- 2. Performing any act that fails to comply with the spirit of Fair Play.

Specifications of Race Track:

- 1. The line would be of black color and red color on a white background.
- 2. Lines with dead ends shall be indicated by red color.
- 3. The line width would be 3cm.
- 4. There could be empty space between lines or there could be some broken lines.
- 5. Tracks will be uploaded soon on our event page

Organizers' Decision:

- 1. The organizers reserve the right to make changes to any of the above in the interest of fair play and sportsmanship, and to ensure that all competitors have an enjoyable competition.
- 2. In the event of ambiguity, the organizers' interpretation of any clauses of the rules shall prevail.