LINE FOLLOWER:

DESCRIPTION:

Design a fully autonomous robot that will follow a black line in the minimum possible time.

Robot specification:

- 1. The dimension of the robot should not exceed: 25cm x 25cm x 20cm
- 2. The maximum DC voltage should not exceed 12 V.
- 3. No external power supply will be provided and must be within the robot itself.
- 4. Robots must be fully autonomous without any input from the operator and it should not use any sort of combustible energy source.

Rules and regulations:

Team size ≤ 3

- 1. The robot will be inspected before it is allowed to compete for the event.
- 2. The contestants should submit their robots 30 minutes before the event commences.
- 3. One team is allowed to contest through only one robot.
- 4. Participants from different educational institute can form a team.
- 5. The width of the track will be 2.5 to 3 cm throughout the track with a POSSIBILITY of a minor ERROR.
- 6. The line that the robot should follow will be black and surrounding area will be white.
- 7. A photograph of the track will be uploaded shortly.
- 8. The contestants will not be allowed onto the arena. The handling of the robot on the arena will be done only by the event coordinators.
- 9. If a robot leaves the path and cannot find it again, operator may reset the robots to the previous checkpoint on the path. The robot can be reset up to 3 times.
- 10. The decision of the event manager will be considered final and undisputable.
- 11. The organizers reserve the right to change any of the rules, if they consider necessary. The changes will be notified. Please check website consistently for updates.
- 12. Every participant has to complete the qualifying round compulsory.
- 13. After qualifying round there are two rounds in the final round.
- 14. In the first final round participant have to complete the given track.
- 15. In the second final round participants has to indicate the blank in the given track.
- 16. Participant has to design their robot according to that, with which it indicates the blank with any indicator like **led blinking**, **buzzer** etc.
- 17. Participant who have successfully complete the given track with maximum blank in the track and minimum time duration.

POINTS SCHEME:

- 1. In the qualifying round there is no point to be counted. Only you have to complete the qualifying track in least time.
- 2. In the first final round you have to complete the given final round track in least time. In these your time for complete the track is important. It will give you some extra points in the final round.
- 3. In the second final round you have to indicate each blank with your indicator and complete the track.
- 4. The point scheme in the final round is follow.
 Total points = [50 (complete each V shapes) + 25 (complete every 90® angle) + 10 (indication of every successful blank) + bonus points for minimum time in first final.]

For any queries contact:

EVENT MANAGER: - TUSHAR KANSARA (7383701060).