SUMO AUTO 3KG
2025

1. Deskripsi

The Sumo Auto 3Kg Robot Competition is a type of robot competition which aims to create an independently moving robot that is able to push opposing robots out of the ring determined according to the competition rules.

2. Participant

1) Students in categories at elementary, junior high school, senior high school and open.
2) Consists of a minimum of 3 students and a maximum of 5 students.
3) Fulfill administrative requirements (Registration and Payment)

3. Spesifikasi Robot

1) Each team must have its robot which is only one robot is permitted on the track
2) At the time of competition the robot must be in a form that has been assembled and ready to use
3) Size Robot and weight :
   - Robot size does not exceed 20 cm x 20 cm at idle or initial position.
   - The weight of the robot + battery should not exceed 3 kg (excluding controller).
4) There is no limit to the robot's height.
5) The robot works according to remote control with a 12V dry battery supply with 1V tolerance. Only allowed to use 1pcs battery
6) Do not use a power supply of hazardous materials
7) Robots must not damage field property
8) The robot is not allowed to emit liquid, fire or other things
9) Robots must not grip the ground using diaphragms, suction cups, and others
10) The robot must move automatically, without any form of external control or external intervention.

4. Arena

Use board MDF (Medium Density Fibreboard) coated, Acrylic or rubber coated (TBD)

5. Match Rules

1) Before Competition

- Committee will check several things as follows (robot power supply voltage, robot dimensions, weight, robot ownership/label)
- If the robot does not comply with the provisions, the team is given 5 minutes to adjust the robot's specifications immediately. If it still does not comply with the specified limits. The team can not following this competition.
- Each team is required to show and safety equipment (gloves and shoes).

2) During Competition
   - Competition uses a point system and a knockout system
   - Starting position of the robot can be anywhere behind the straight line.
   - The game is done with a maximum of 3 rounds.
   - The robot is declared victorious if the opposing robot leaves the field,
   - If both robots are both out of the field, then the first robot to leave the field is declared a loser
   - The winner of this game is the one who has won 2 rounds
   - Robots will be quarantined before the game
   - Participants are allowed to only use the same robot during the match.
   - If a robot stops/does not move at all for 10 seconds, then the robot is declared defeated (no points).
   - If both robots stop, then a rematch will be conducted
   - Provide 1 minute SERVICE TIME to prepare the robot before the match starts. It is permissible to replace flexible or identical parts.
   - Each team is given 1 time out for 1 minute per match (3 rounds). Time out is done after the game and if a team requests it. Battery replacement is not permitted during time out.

6. Scoring

1) The robot is declared victorious if the opposing robot leaves the field
2) The winner of this game is the one who has won 2 rounds.
3) The game is declared a draw if no robot wins within 3 minutes.
4) A death match occurs if there is still no winner after 3 rounds.
5) If a death match occurs, a rematch will take place until there is a winner

7. Violation

1) touching the robot during the game is not permitted unless explicitly permitted by the referee.
2) The size of the robot does not comply with the specified provisions

Rules are adopted from various National and International robot competition activities