# **ROBO SNOOKER**

### **PROBLEM STATEMENT:**

The basic theme of the play is putting the ball in the pocket by hitting it with a cue ball.

The bot can have a hitting mechanism or it can play by jerking the cue-ball under a given allowance (for bot not to cross the crease).

For any hit, the crease is 3inch in front of the cue.

# **ROBOT SPECIFICATION:**

- 1. The ROBOT should fit of dimension 300 mm x 300 mm x 300mm (1 x b x h). The dimensions will be consider between two tyres.
- 2. The machine should not exceed 8 kg of weight. Weight of remote controller will not be counted.
- In case of wired robots, wires should at least 5 m long.
  Output of connected power packs used by a robot cannot exceed 12.0 V (on board power supply should not be given by the institute).
- 5. Wheels & other part of the robot may not be treated with any fluids, glue or other substances.
- 6. The game will be played in manner of fifa rather than war.
- 7. Ball should not be picked by covering mechanism, ball should be dragged by using clamps or any other open mechanism.

# **A ROBOT MUST NOT CONTAIN FOLLOWING THINGS:**

May Not emit infrared light, any components that may be hazardous to participants, the board, or other robots, Sharp or pointed edges, Strong magnets, Liquids, Shooting parts, any kind of flame or flammable component.

#### **TEAM SPECIFICATION:**

A team may consist of minimum 2 and maximum of 4 participants. Participants can be from the same or different educational institutes.

### TEAM NAME:

- Every team must have a name which must be unique. Event Coordinators reserves the right to reject entries from any Team whose name it deems to be inappropriate, offensive or conflicting. Organizers must be notified if a Team's name gets changed.
- Team Representative: Each team must specify their Team Representative (Leader) at the time of registration on the website. All important communications between Event Coordinators and the registered teams will be done through Team Representative. The Team Representatives must submit valid contact details (phone no., email ID etc.) at the time of registration.

**NOTE:** During any kind of conversation, registration, communication, mails or submissions the team must identify themselves using their Team ID that will be provided at the time of registration.

Please do not use your team name as your identification in any kind of communication with us. Follow this rule very strictly.

**NOTE:** Robots that do not abide by the above specifications/regulations are not allowed to play. If violations are detected during a running game the team is disqualified for that game. If similar violations occur repeatedly, the team can be disqualified from the tournament.

# **GAME FORMAT:**

# Round 1:

- 1. Single player time based.
- 2. Four red balls will be placed at the corners of the trough. The ball position will be across and in front of the pocket.
- 3. Position of the cue will be the choice of the player.
- 4. The best timers who cleared the trough will be selected.
- 5. Direct contact of the bot or a wire with the ball leads to a penalty of 5seconds.

### Round 2:

- 1. Two players time based.
- 2. Three green and three pink balls will be placed in the pot.
- 3. Player starts with the cue inside the D, and heads to clear the trough. For every foul, the player suffers penalty of 5seconds.
- 4. Two best timers will be selected.

# Round 3:

- 1. One-on-One points based.
- 2. The actual snooker pool match is played with the rules set by the referee.

#### NOTE:

A robot cannot hold a ball. Holding a ball means taking full control of the ball by removing all of its degrees of freedom.

If a robot requires a repair or an adjustment between any rounds or matches, competitors must make those repairs as quickly as possible. They should not be allowed to do so more than 3 minutes.

#### **CERTIFICATE POLICY:**

Certificate of Excellence will be given to all the winners. Certificates of Participation will be given to all the teams who will participate in the competition.