# **BASKOBOTS**

#### **INTRODUCTION**

This fall, will you be our college MVP? Then get ready with your bot to shoot some 2's and 3's off the hook!

Baskobot challenges your imagination and technical skills to design a point guard bot in your team!

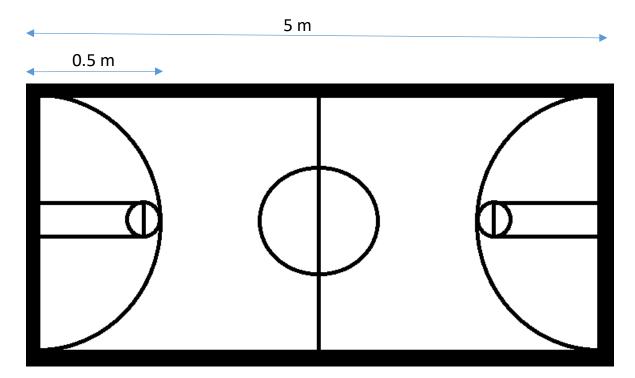
Take it as a challenge and design a bot that hates to miss a swish!

## **PROBLEM STATEMENT**

To build a manual bot having a throwing mechanism to throw the balls into the basket.

### **QUALIFYING ROUND**

- 1. The arena consists of a rectangular court (5m x 3m)
- 2. There will be 2 robots in the arena, occupying each half court and trying to basket as many balls as possible.
- 3. The half court is 2.5 m (approx.) from the basket. Each half court is assigned to one team.



- 4. The D box in front of the basket is 0.5 m (approx.) from the basket.
- 5. The court contains stress relief balls at different locations.
- 6. Any throwing mechanism is allowed (but the body of the bot must be in contact with the ground).
- 7. If the robot puts the ball in the basket from half court (2.5 m) 5 points will be awarded. If it puts the ball from the D box (0.5 m) 3 points will be awarded.
- 8. If the ball hits the basket (but does not fall into it), 0.5 points will be awarded.
- 9. Time for each game play will be disclosed on the day of the event.

NOTE: Subsequent rounds will be disclosed at the time of the event.

#### **BOT SPECIFICATIONS**

- 1. Any kind of shooting mechanism is acceptable until the surroundings are not damaged.
- 2. The maximum dimensions of the robot is  $30 \text{cm} \times 30 \text{cm} \times 30 \text{cm} (1*b*h)$ .
- 3. Robots can be wired, wireless, or autonomous.
- 4. The potential difference between any two points should not exceed 12V.
- 5. Power supply can be ON/OFF board.
- 6. There is no weight limit for robots.

7. Tolerance of 5% on dimensions and power supply will be allowed.

#### **RULES AND REGULATIONS**

- 1. A team can consist of a maximum of 4 members.
- 2. Members of different institutions can form a team and must carry your respective college ID cards.
- 3. Only 2 members of a team are allowed to stay around the arena (for controlling and assisting).
- 4. Only undergraduates are allowed to participate in the event.
- 5. Any kind of damage to the arena will not be entertained, and if done, the robot will be immediately disqualified.
- 6. Collision of the robots during the game will not be entertained.
- 7. No technical assistance will be provided by the coordinators during the time of the event.
- 8. No practice runs will be provided.
- 9. Human interference (e.g. touching the robot, stepping into the arena) during the game is not allowed.
- 10. No external power supply will be provided at the time of event.
- 11.A robot with the base of a toy car and its gearbox as a machine part will be disqualified. Also, LEGO kits are strictly prohibited.
- 12. Participants with wired robots are strictly advised to get wires of length 3m or more. The wires should be given slack throughout the gameplay.
- 13. Member participated from a team cannot participate in another team for the same event.
- 14.A robot is allowed to participate only once in that particular event.
- 15. The organisers are not responsible for any kind of damage to your robot.
- 16.In case of any discrepancies, the decision of the coordinator and the event head shall be final and no further arguments shall be entertained.

NOTE- Kindly be updated with the ROBOVANZA website to know the changes.

# **CERTIFICATE POLICY**

- 1. A certificate of participation will be awarded to all participating teams except for the disqualified teams.
- 2. A certificate of appreciation (or excellence) would be awarded to the winners.