#### DEPARTMENT OF MECHATRONICS ENGINEERING

**EVENT NAME:** Line Follower

# **Event Description:**

The Line Follower robot is a mobile machine designed to detect and follow a line drawn on the floor. The path can be predefined and may either be visible, such as a black line on a white surface, or invisible, such as a magnetic field. The robot senses the line using infrared (IR) sensors installed beneath it.

# Rules and Regulations:

- 1. The robot must move autonomously, starting with the push of a button. No wireless or wired remote control is allowed.
- 2. Robot dimensions must not exceed 20cm (length) x 20cm (width) x 20cm (height).
- 3. Course time is measured from the moment the robot crosses the starting line until it crosses the finish line. A robot is deemed to have crossed the line when the forward-most wheel, track, or leg contacts or crosses the line.
- 4. Each robot must complete the course at least once, with a maximum of three attempts. The best result will be selected by the referee.
- 5. If the robot leaves the arena, it will lose one attempt. A robot is considered out of the arena if any wheel, leg, or track moves completely off the surface.
- 6. Each team will have 3 attempts, and the fastest time among these will be considered as the final time.
- 7. Robots will be inspected and quarantined 5 minutes before each attempt. No reprogramming or modifications are allowed after the setup time.

#### **EVENT NAME: Connections**

# **Event Description:**

Connections is a strategy-based puzzle game where players aim to create links or connections between specific points or items on a grid or board. It requires spatial reasoning, strategy, and sometimes competition or collaboration.

#### Rules and Regulations:

- 1. Each team consists of 3 members.
- 2. Materials may include a board, cards, or a digital platform with items to connect.
- 3. Players take turns in a predetermined order.
- 4. Teams must explain the connections between the selected items.
- 5. Points are awarded based on the creativity and accuracy of the connections.
- 6. Each slide will have specific time limits for the teams to make their connections.

## **EVENT NAME: Chinese Whisper**

## **Event Description:**

In this game, one person whispers a word or sentence into the ear of the next person in line. The message is passed along the chain, with each person whispering what they believe they heard to the next. By the end, the message is usually completely altered, leading to humorous or surprising results.

## Rules and Regulations:

- 1. Each team consists of 5 members.
- 2. The originator whispers the message to the next player. Only the next player can hear the message, and they cannot ask for clarification.
- 3. Each player hears the message only once and must whisper what they heard to the next person, without repetition.
- 4. There will be time limits to pass the message at each stage.
- 5. Keep the original message relatively short to ensure clarity.
- 6. You can introduce themes for the messages, such as movie titles or quotes, for added fun.