Robo Soccer

Robo Soccer is a real time arcade game in which each bot is required to put a soccer ball in the desired area just like what happens in the game of football.

Name of Event: Robo Soccer

Robot per Event: One

Robot Weight Range: 5 Kgs

Robot Dimensions: 30*30*30 cms

Battery Power: 40 V {230 V} AC/Dc

Arena Specifications: As per Center

Engineering Principles: Art, Mechanical Engineering, Electrical Engineering, Computer

Science, etc.

- 1. Game Procedure
- 1.1Each team can have only 1 member.
- 1.2Team have be pre ready with their bots .No Time will be given after the bot is on the Arena.
- 1.3There will be different colours of ball and similar posts to them. The bots have to put the balls in the respective posts.
- 2. Specifications
- 2.1 Bot Specifications:
- 2.1.1 Bot dimension & fabrication:
- 2.1.1.1The dimension of the bot should not exceed 30cm x 30cm x 30cm.
- 2.1.1.2The weight of the bot should not exceed 5 Kgs. (Excluding remote control and remote control wire.)
- 2.1.1.3In case of a wireless bot weight will be counted as (0.8x actual weight).
- 2.1.1.4Readymade gear boxes, parts, chassis, control circuits and remote control can be used.
- 3. Bot control:
- 3.1 In case of wired bots, the wires should remain slack at any instant during the fight. All the wires coming out of the machine should be stacked as a single unit. Also, the wires should be projected 1000 mm above the ground to avoid entanglement.
- 3.2 In case of wireless system, it should have a minimum four frequency remote control circuit or two dual control circuits or a transmitter receiver paired module so that the frequency interferences with opponent team can be avoided (in case of any interference in the wireless systems, they will not be considered for rematch or in the

results).

- 3.3 Remote controls that are readily available in the market may also be used.
- 4. Battery & power:
- 4.1 The machine can be powered electrically only.
- 4.2Use of an IC engine in any form is not allowed.
- 4.3Batteries must be sealed, immobilized electrolyte types (such as gel cells, lithium, NiCad, NiMH, or dry cells).
- 4.4 The electrical voltage at any point of time in the machine should not exceed 40~V~DC/AC.
- 4.5 230V (AC) power will be provided.(wired bots)
- 4.6 In case of wireless bot batteries should be placed on the bot also teams cannot use 230V(AC) external supply.