## ****DOODLE JUMP INTRODUCTION****

Time to play live mobile games….

Build your own “Doodlers” to cross the maximum number of hurdles and reach to the top.

## ****Objective****

Build a wireless/wired controlled manual bot to climb up stairs and overcome all the hurdles on its way to reach to the top fastest defeating the opponent teams.

## ****BOT SPECIFICATIONS:****

* Actual size of bot before the start of match should not be more than 50cm x 50cm. However it can expand limitlessly in any direction after the start of the match.
* Maximum allowed voltage : 24V
* For pneumatics/hydraulics maximum allowed pressure is 5 bar.

## ARENA

 Actual arena is shown in the figure.The arena may not be to the exact dimension but with a tolerance u to 10mm.(DOWNLOAD ALL IMAGES OF ARENA-right click and select save as)

 The teams can choose their starting point from the two starting points available in the arena as shown in the fig.

 Major hurdles - different-sized stairs (with maximum rise =250mm) and other obstacles as illustrated.

* No slope angle will be greater than 30 degree.
* All the Stairs will have rise less than or equal to 250 mm, tread and width more than 500mm.
* There will be various checkpoints distributed throughout the arena.
* Few other hurdles will be disclosed on the spot.

Note: Given figure is not upto scale. Stair sizes may change unlike shown in figure.

## RULES

* A team of maximum 5 members is allowed.
* Each team will be given 3 minutes for trial run before the match to get acquainted with the arena.
* During Final run team will be allowed to touch their bot or take restart only three times with a penalty of 30 points for each restart . In such case the bot must restart from the last crossed checkpoint.
* Maximum time allowed for an obstacle is 2 minutes , which otherwise leads to disqualification.
* Only one chance will be given to each team.
* There is no time limit to complete the task.
* The team reaching the top with maximum points wins.

## SCORING

* 30 points to cross minor obstacles and 50 points to cross major obstacles will be awarded.
* 200 points will be awarded for finishing the match.
* 200 bonus points will be awarded for wireless bots.

FINAL SCORE = (TOTAL POINTS EARNED) - (TIME TAKEN (SEC) / 3)