

e-Yantra Robotics Competition (eYRC 2019-20)

Updated Rulebook

The information provided in this document should be followed as part of the Rulebook, which most of you are aware of. Fig. 1 shows the scoring zones for a **City** having an **Aid**. If the aid lands anywhere other than the respective city scoring zone, then that particular city aid will not be considered for scoring.

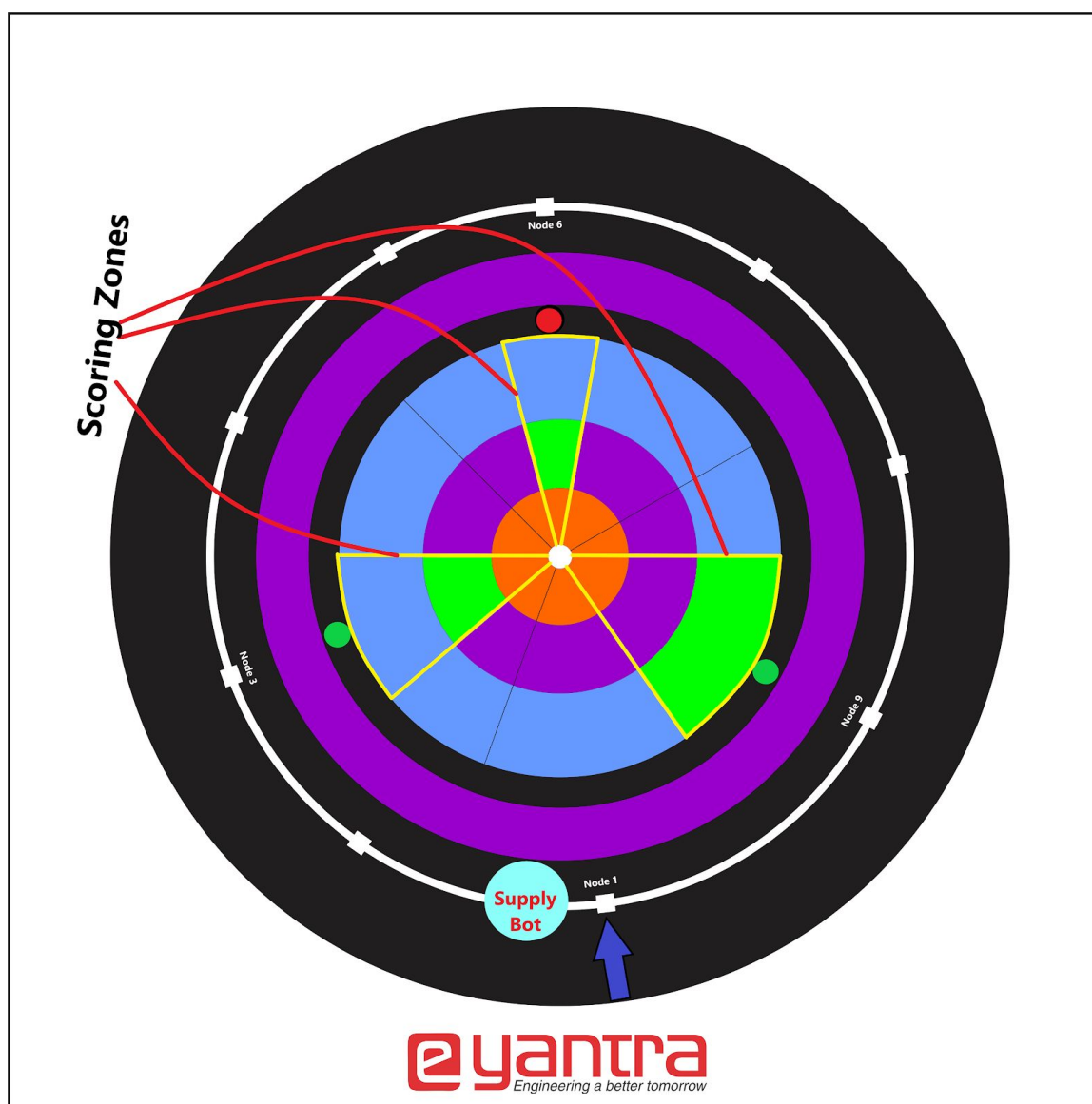


Fig.1: Key elements for scoring

Judging and Scoring

$$\text{Total Score} = (TT - RT) + (NH*100) + (CD*30) - (P*40) + (CB * 75) + B$$

Where -

TT = Total Time for Run (480 seconds)

RT = Total Run Time taken by Supply Bot (in seconds)

NH = Number of Relief Aids dispatched (coins hit correctly) - this is awarded when the coin lands in any of the **Village (purple/orange/white region)** which indicates dispatch except the **Dead Zones** and **Lake** as it will sink in these regions.

The NH will be counted as valid only if the Relief Aid reaches the Villages of its respective City Node's Sector.

CD = Correct Detection of City (Nodes where the coins are placed)

P = Penalty incurred (maximum of 5 and a minimum of 0).

CB = Relief Aid correctly deposited Bonus (maximum 4 and minimum 0) - 2 CBs will be awarded on dispatching the (Red coin) Medical Aid first and being able to place it within the innermost Village (White circle). A single CB will be awarded for (Green coins) Food supplies each.

Note: If the (Red Coin) Medical Aid is dispatched at any point later than the first dispatch, a single CB alone will be awarded for this dispatch and the Medical Aid will have considered the same as Food Supply (Green coin).

B = Run Bonus (if no penalty has occurred at all). This is an overall Run Bonus. **The value of this Bonus is 200 points.**

Some Notes specifying **IMPORTANT** detailed instructions, in the finals:

1. **The minimum Sector angle will be 30 degrees. However, the number of nodes will still remain a total of 9.**
2. **The Dead Zones will be placed at locations different from those placed now.**
3. **The Capital will never have any Relief Aid.**

However, the layers of concentric circles will not change.

The dimensions of the arena and it's elements like diameter and thickness of rings will not change.

Good Luck!!!