

# SCIENCE AND TECHNOLOGY COUNCIL

# **TAKNEEK '18**





Points: 15

## MAMA BUG

### Pool Event (Y18 only)

Time for an aerial combat. Design and fabricate a glider called Mama Bug which would fly without any electronics.

### **Problem Statement:**

There are five kingdoms (5 pools). In each kingdom there is a queen and eight soldiers. All the kingdoms have a quest for the Composite Throne. Each of the queens and the soldiers have to design and fabricate a Mama Bug of their own which would have a very good gliding capability. This Mama Bug would be the lives associated with every individuals. It would be guided with the help of a cardboard. If the Mama Bug dies, that particular individual also dies. All the kingdoms have to prepare for a league battle so as to get hold on the Composite Throne and rule all the 5 kingdoms. Each kingdom will face 4 battles and soldiers can be swapped in all the matches at the beginning and not in between a battle. There will be a final battle between the top two teams in the league table after all the battles are over.

#### Battle:

Two kingdoms at a time will be there in a battle. Queen along with two soldiers will be there in a battle from one kingdom. The task of the soldiers is to protect their queen from the soldiers of the other kingdom and also to attempt to kill the queen of the other kingdom. Any of the individual is declared dead as soon as his/her Mama Bug falls on the ground. A team will be declared as the winner of the battle at the very moment they succeed in killing the queen of the opposing team. Killing will be carried out by generating a gust effect with the help of the cardboard and making the Mama Bug of the opposing kingdom unstable and eventually leads to falling of Mama Bug on the ground.

## **Rules and Regulations:**

- Each of the teams will face the four other teams in a face to face combat.
- Battle will be for 5 minutes.
- Cardboard cannot be larger than the dimension of 40cm \* 40cm.
- Any individual is not allowed to touch a person or the Mama Bug directly. If anyone does so it will result into a penalty of 1 point along with the disqualification of the kingdom from that particular battle and the other team will be declared as the winner.
- The moment an individual's Mama bug falls on the ground he/she must leave the battle ground immediately. Any activity after that will result into a penalty of 0.5 points and may lead to disqualification.
- Queen will be considered dead only if the attacking person's Mama Bug still remains in air while the queen Mama Bug lies down on ground.

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- If the attacker also falls down along with the queen, the battle will be started all over again.
- Winner of the combat will gain 3 points.
- Loser of the combat will gain 0 points.
- If it's a draw both the teams will gain 1 point each.
- Number of alive Mama Bugs will be counted after each battle ends.
- In case of a tie at the end of the league, the kingdom with maximum number of alive Mama Bugs will be declared as the winner.
- Again if it's a tie then it will be declared as a tie and final points will be distributed evenly among the two finalists.

#### Note:

- \*\* In case of any disputes, the decision of the coordinators would be final and binding to all.
- \*\*Team must report on scheduled time. If any team will fail this condition then points will be deducted as following scheme from their total score
- For first 10 minutes
  - 0.2 points penalty per minute
- For 10 to 15 minutes
  - 0.4 points penalty per minutes
- After 15 minutes team will be disqualified.

In case of any problem, feel free to contact.

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