# EVENTS 1. FOX HUNT:

{use of mobile phones is prohibited.}
[\*\* TEAM EVENT\*\*]

#### **STAGE1: INTRA POOL FOXHUNT COMPETITION**

#### \*NO BATCH RESTRICTION\*

SHEDULE →DAY : 1- prelims 2- prelims 3- semi-final 4- grand finale.

Caution money → Rs 100 (fully refundable)

For the first round, fox hunt would be played by teams which would be competing with other teams of their pool only.

Max teams which would be allowed to compete in foxhunt from a single pool: 12 Min teams per pool : 8 <!-- if a pool has less than 8 teams then that pool will be disqualified. -- >

Max members per team: 4 Min members per team: 2

It means we would be witnessing 3 matches per pool at the first stage.

<!-- each match would be conducted between 3 / 4 teams depending upon total teams participating --> <!-- maximum time to find "fox" for this round would be 30 minutes. If no team is able to find it in the given time then there will be no winner . --!>

This would mean 3(at max) winning teams per pool would proceed to next stage. *Note ::-- out of the 5-9 losing teams , 1 would get a wild card entry.* 

#### Wild card Question:

Just they need to identify the direction of fox and nothing else.(judging criteria would be on the basis of most accurate identification of the direction of fox and in case of a tie ,least time taken would be considered).

So from each pool we would be having 4(at max) teams qualifying for semi-final.

#### Venue: OLD SAC

### **STAGE 2**→SEMI-FINALS:

16(at max) teams qualify for semis which would be conducted on Saturday .

<!—if any pool is disqualified based on criteria mentioned earlier, then the teams of competing pool will get a walkover .-->

<!-- maximum time to find "fox" for this round would be 45 minutes. If no team is able to find it in the given time then there will be no winner . --!>

#### League division system:

1st slot : 2 teams of hall 3 and 2 teams of hall 2 ----- conducted by secys from hall 5/9 2nd slot: 2 teams of hall 5 and 2 teams of hall 9 ----- conducted by secys from hall 3/2 3rd slot :2 teams of hall 9 and 2 teams of hall 3 ----- conducted by secys from hall 2/5 4th slot :2 teams of hall 2 and 2 teams of hall 5 ----- conducted by secys from hall 3/9 **Top team from each semi final makes it to final.** 

## STAGE 3 → FINALE

#### How finale would be conducted:

4 teams would play against each other. The positions would be allotted in the same order in which the teams find the fox.

<!-- maximum time to find "fox" for this round would be 90 minutes. If no team is able to find it in the given time then there will be no winner . --!>

### IMPORTANT DETAILS→

#### Where to find fox.. ??

Fox can be anywhere in the campus except for any of the halls.

For the intra-pool round and semi-finals  $\rightarrow$  fox would be stationary.

#### For finale $\rightarrow$ fox would be mobile.

**CAUTION MONEY REFUND**  $\rightarrow$  Money would be refunded to all teams (who would not damage any components). Time slot would be allotted for teams to collect the money , after the entire competition gets over.

### <u>Point structure $\rightarrow$ </u>

1st: 25 2nd: 15 3rd: 7.5 4th: 2.5

Note  $\rightarrow$  In case of any doubt feel free to contact:

#### SANKALP SHUKLA

(sankalp@iitk.ac.in)(kuldeepy@iitk.ac.in)(8765304249)(9565873770)(102/3)(241/3)\*The decision of organizers would be final and binding for all participants in all rounds.\*

**KULDEEP YADAV** 

# EVENT 2 $\rightarrow$ MORSE CODE TEAM CHALLENGE:

{use of mobile phones is prohibited.} \*\* [POOL EVENT] \*\*

# No. of rounds $\rightarrow$ 2

### **ROUND 1: PRELIMS**

Any no. of teams in a group of two has to come and participate. (Both of them are expected to know Morse code)

### How it will be conducted:

One of the team members would be allowed to come in the lecture hall room while the other has to stay out then we would be giving him Morse code and he has to translate it into ordinary language (alphabets and nos.) and then again the second participant would be called and asked to convert back to Morse code.

The accuracy of conversion of a team would matter in judging. A team should at least correctly decode 4 characters to qualify for the second round.

<!-- A team should at least correctly decode 50% words of the given set , to qualify for the second round.-->

\*marks of first round will not be 'carried on' to the next round.\*

### ROUND 2: Quizo - Morse round

In this round, 2 participants would be voted by each pool(among all their teams who qualified the first round) to play the second round. Here they would be shown some music video, film, sports or any other important thing like personality and Morse code for something (so as to listen Morse code, there is some interference), some person or anything else would be sent to them. Members of pool who were sent to play, will decode the Morse code and interpret it at the earliest. There would be 10 marks for each correct guess to the pool.

If they are unable to guess correctly, the question will be open to the other members of the same pool (who qualified the first found) sitting at the back and not playing.

If they answer it correctly then 5 marks will be awarded to the pool. Otherwise zero marks for that question.

In total whichever pool has the maximum marks wins the event.

\*In case of a tie, there would be 3 questions on the buzzer basis.\*

### **Points:**

1st : 15 points 2nd :9 points **3rd**: 4.5 points 4th: 1.5 points Note  $\rightarrow$  In case of any doubt feel free to contact:

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**KULDEEP YADAV** 

# **EVENT 3: JUGNU/SATELLITE AND HAM QUIZ**

# \*\* [TEAM EVENT] \*\*

This quiz would be on the spot at some LHC where question papers would be distributed. **All the questions will be Multiple choice**.

The questions would be related to HAM license examination, satellite communication, basic electronics and general technical awareness.

In case of a tie, the questions marked with "\*" would be counted. The team answering more no. of questions marked with "\*" will be given a higher position".

If still there is a tie, then average of the points would be given. For example, if there is a tie for  $1^{st}$  and  $2^{nd}$  position then 8 points will be given to both the teams instead of giving 10 and 6.

**Time** $\rightarrow$  1 hour.

#### POINT STRUCTURE $\rightarrow$

**1st** : 10 points **2nd** : 6 points **3rd**: 3 points **4th**: 1 points

Note  $\rightarrow$ In case of any doubt feel free to contact:

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# **EVENT 4: ANTENNA DESIGN CHALLENGE**

# \*\* [TEAM EVENT] \*\*

### Problem statement:→

You have to design and fabricate an antenna such that it receives the maximum signal transmitted by the transmitter.

The surroundings and constraints are defined below:

- 1. Transmitting frequency = 146 MHz
- 2. Transmitter: icom ic-v8 transceiver.
- 3. Height of transmitter from the ground: 1.5 meter.
- 4. Height of receiving antenna from the ground: 1.5 meter.
- 5. Linear distance between transmitter and receiving antenna = 50 meter.
- 6. Material for antenna must be only Aluminium (provided by the club).
- 7. Maximum weight of the antenna = 300 grams.

#### **Rules:**

- 1. At max 2 teams can participate from each pool.
- 2. No. of member per team: at max 4.
- 3. Material and equipment's will be provided by the club.
- 4. Using Field Strength Meter the strength of the signal received by your antenna is recorded and the team with highest signal strength will be given 1<sup>st</sup> position, team with second highest signal strength will be given 2<sup>nd</sup> position, team with third highest signal strength will be given 3<sup>rd</sup> position and team with fourth highest signal strength will be given 4<sup>th</sup> position.
- 5. Team without the fabrication of the antenna is disqualified.
- 6. In case of a tie, the team designing antenna with minimum weight would be given a higher position.
- If still there is a tie at some position, then average points will be equally distributed to both the teams, e.g. there may be a tie between 1<sup>st</sup> and 2<sup>nd</sup> position, then 16 points will be given to both the teams instead of giving 20 and 12.
- 8. If only three teams fabricate the antenna then only three positions will be declared which means that a team has to fabricate its antenna design to hold a position.

# Point structure: $\rightarrow$

 $\boldsymbol{1^{st}: 20 \text{ points}}$ 

2<sup>nd</sup> :12 points

3<sup>rd</sup>: 8 points

4<sup>th</sup> : 2 points

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