

# K.L.N. COLLEGE OF ENGINEERING

Department of Mechanical Engineering

## IMPELZ '14

### EVENT FORMAT

<b><u>GROUP A (F.N)</u></b>	<b><u>GROUP B (A.N)</u></b>
1.Paper Presentation	4.Technical Quiz
2.CAD Modeling	5.Water Rocketry
3.Mr.Machinist	6.Just a Minute

## **GROUP A**

### **1. Paper Presentation**

#### **Event Format:**

The participants are expected to send their full paper for the first round selection. All papers sent must include an abstract and stream specification. Selected papers will be intimated and their papers are to be presented in IMPELZ'14.

#### **Streams for Paper Presentation:**

1. Thermal
2. Design
3. Manufacturing

#### **Important Dates:**

1. Last date for submission of papers: **September 10, 2014**, Wednesday.
2. Intimation to selected candidates: **September 15, 2014**, Monday.
3. Selected candidates will be asked to present their papers on **September 19, 2014**, Friday.

#### **Rules:**

1. The number of authors for a paper is limited to only two.
2. The authors can also be from different institutions.
3. Originality and innovation is appreciated.
4. Papers should be neatly typed on A4 paper with 1.5 line spacing, Times new roman and font size 12.
5. The Participants are requested to send a soft copy of the paper with maximum pages not exceeding 10.
6. The abstract should not exceed 250 words.
7. Send your papers to **mechimpelz2014@gmail.com**.
8. Selected papers will be intimated through mail.
9. Time duration- 7 min for presentation, 3 min for discussion.
10. Decision of judges will be final.

## **2.CAD Modeling**

### **Event Format:**

The event has two rounds. Qualified teams in prelims can show their Design skills in the finals.

### **Prelims:**

The preliminary written test on the basics of CAD softwares will be conducted based on the registration count.

### **Final:**

The participants should solve and draw the given problem using the softwares provided.

### **Rules:**

1. A maximum of two members per team is allowed.
2. Team members can also be from different institutions.
3. Software to be used for the final round includes Pro-E or AutoCAD.
4. Problem statement will be given at the time of the event.
5. Design is to be completed within the given time duration.
6. Time taken to complete and the number of features added will be taken into account.
7. Decision of judges will be the final.
8. Spot registration not allowed, Last date for registration is 15.09.2014.

## **3.Mr.Machinist**

### **Event Format:**

The participant must machine the given job as per the given specifications within the time limit.

### **Prelims:**

The preliminary written test on the basics of manufacturing and workshop technology will be conducted based on the registration count.

### **Final:**

The participant should machine the component as per given the specifications using a Lathe.

### **Rules:**

1. This is a solo event, Single participant should participate.
2. All the tools required for machining will be provided.
3. All the Participants will be given individual lathes.
4. The finished Product will be evaluated based on the Accuracy in Dimension, Surface finish, and Process time.
5. The time for machining will be given on spot.
6. Judges decision will be final.
7. Spot registration not allowed, Last date for registration is 15.09.2014.

## **GROUP B**

### **4. Technical Quiz**

#### **Event Format:**

Participants knowledge in various fields of mechanical engineering will be tested through a series of rounds.

#### **Prelims:**

The preliminary written test will be conducted based on the registration count.

#### **Final:**

Teams clearing prelims will qualify for the finals.

#### **Rules:**

1. Only two members are allowed per team.
2. Participants from different colleges can form a team.
3. The quizmaster's decision is final.
4. Arguments over final decisions is not permitted.
5. Spot registration not allowed, Last date for registration is 15.09.2014.

## **5. Water Rocketry**

### **Event Format:**

Participants should bring their self-designed Water Rockets and the performance of the rockets will be tested.

### **Prelims:**

Top 6 rockets will be selected based on maximum distance covered.

### **Finals:**

1. Rockets can be launched 2times and the maximum distance covered will be taken for consideration.
2. Rockets will also be evaluated based on stability, angle of deviation and damage incurred during landing

### **Rules:**

1. Only teams that consist of a maximum of two members can enroll for this event.
2. The teams are expected to build a rocket using only a single bottle and capacity of 2 - 2.25 litres
3. Use of multistage rockets , chemical agents are not permitted.
4. The rocket should be capable of withstanding a minimum pressure of 15 psi to a maximum of 40 psi.
5. Launch pad will be provided. The teams are not allowed to use their own launch pads.
6. The performance of the rocket is tested based on distance travelled by the rocket, stability, angle of deviation, and proper landing.
7. Judges decision will be final.
8. Spot registration not allowed, Last date for registration is 15.09.2014.

## **6. Just a Minute ( JAM):**

### **Event Format:**

This event consists of only one round. The participants are allowed to speak on a technical topic given to them for about 1min.

### **Rules:**

1. This is a solo event, Single participant should participate.
2. Topics will be purely technical and will be given on the spot.
3. Points will be allocated based on Technical content, Clarity and overall presentation before judges.
4. Hesitation to talk and Repetition of sentences will decrease your points.
5. Time limit is strictly restricted to one minute. No participant should talk for more than 1 minute.
6. Judges decision will be final.
7. Spot registration not allowed, Last date for registration is 15.09.2014.