

# **Topics to be covered in Wings Workshop**

## **Session 1**

- o Introduction to Aeromodelling
- o Discuss Goals of Workshop
- o A brief introduction about modeling Aeroplanes -Static and Flying models
- o Explore different categories - Free Flight, Powered Free Flight, Control Line and Radio-Control Flying
- o Materials in Aeromodelling

## **Session 2**

- o Getting your Hands Dirty
- o Construction of the 40cm Balsa Glider from the Pre-cut KIT
- o Flying the 40cm Balsa Glider
- o Experimenting with the different Wing Configurations & Learning

## **Session 3**

An Introduction to Flight

- o What Makes Planes Fly?
- o Overview of Flight Control Surfaces
- o The Four Basic Forces of Flight
- o Basic Terminologies
- o How Planes can Maneuver

## **Session 4**

An Introduction to Gliders

- o What are Gliders? How do they Glide?
- o Understanding the Wing and its Importance
- o Types of Wing Construction
- o Basic Glider Design - What goes where?

## **Session 5**

- o Design a Glider within given Constraints & Guidelines
- o Discuss the Designs

## **Session 6**

- o Cutting Techniques for Balsa
- o Cutting the Design from Balsa
- o Sanding & Smoothing Techniques
- o Sanding & Smoothing the Cut Balsa Designs- Putting it all together
- o Discuss concepts of Balance and Center of Gravity affecting Flight
- o Discuss techniques to Chuck
- o Flying the Gliders - Chuck & Catapult Launch

## **Session 7**

Demonstration of RC Flying

- o Flying Demo of Basic Aerobatics, World War II Maneuvers, Pattern Flying & Stunt Flying

## **Practical Session**

- o Designing the individual part list
- o Assembling the glider
- o Giving the final touch

## **Certification**

A '**Certificate of Participation**' by HoriZON (An Unit of MBS Group) to all Participants of this workshop. At the end of this workshop, a small competition will be organized among the participating students and winners will be awarded with a '**Certificate of Merit**'.

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