SUBJECT: BASIC TECHNOLOGY

TOPIC: FREE HAND SKETCHING

CLASS: JSS1

LESSON OBJECTIVES

At the end of this lesson, you should be able to:

- Define free hand sketch and state its principles
- Make neat free hand sketches of lines, curves, circles and irregular shapes.

What is Free hand Sketching?

Free hand Sketching is a drawing which is drawn without measuring instruments. This drawing is drawn with the help of pencil and eraser only.

Such drawing is drawn before every type of actual drawing because it takes less time, after doing such drawing, it is pondered over and necessary alterations are made in it if needed. Then the actual drawing is prepared.

USES OF FREE HAND SKETCHING

- Free hand Sketching is used to transfer the idea of an engineer's abstract world to the real world in 2D and 3D.
- It is used for daily communication in the engineering world as drawing is the international language of engineering.

 Free hand drawing is also used to quickly present an idea in a graphical form to non-technical peoples.

• It improves the communication between all the members of a team and also between the customer.

FREE HAND SKETCHING INSTRUMENTS

Following instruments are needed for the drawing of free hand sketching.

- 1. Soft lead pencil.
- 2. Eraser.
- 3. Sharpener.
- 4. Drawing sheet.

PRINCIPLES OF FREE HAND SHETCHING

Following principles should be followed for free hand sketching:

- sketching:
 1. The object should be seen thoroughly and pondered over it's objectives and concepts.
 - 2. More detailed aspect is considered for selection of a view.
 - 3. Scales and rulers are not used in drawing, although, ratio and proportion of different parts of an object are considered.

- 4. Firstly, horizontal lines are drawn then vertical lines are drawn, and arcs and circles are drawn lastly.
- 5. Firstly, the dim lines are drawn so that extra lines may be erased easily.

SKETCHING OF LINES IN FREE HAND DRAWING.

Sketching of straight line

The line is the most important part of free hand drawing as sketching is done by different lines. Straight lines can be divided into different lines such as horizontal, vertical and inclined lines.

Drawing straight lines for the first time is a difficult task.

Mostly result in curved and arcs. This happens due to the forearm when remaining in the fixed position. So when drawing the straight lines, moving your forearm is important. Basically when drawing horizontal straight lines.

The distance between your hand and pencil tip should be 40mm minimum, and your hand should rest on the edge of the paper.

TECHNIQUES FOR SKETCHING FREE HAND

Straight lines: To sketch a straight line using a free hand sketch, you put two dots at the ends of where the line will pass through. Then move the pencil across to the point from the left to the right.

Curves: There are two techniques used when drawing curves using a free hand sketch.

- Use several dots to indicate the path of the supposed
- Gradually join these dots to form the required curve.

Circles: In sketching a circle using a free hand sketch, the following three steps may be useful.

- Sketch a square box
- Sketch center lines to divide the square into four quadrant.
- Finally join each quadrant as demonstrated by the teacher.

Ellipse: The following steps are followed when drawing an ellipse using free hand sketching

- Sketch a rectangular box
- Sketch Centre lines to divide the rectangle into four quadrant.
- Join each quadrant to achieve the required ellipse.

Evaluation

- Define free hand sketch and state its principles
- Make neat free hand sketches of lines, curves, circles and irregular shapes.

THANK YOU FOR WATCHING!!!!