

NAME: MARTINS IMIKAN

MATRIC NUMBER: 18/ENG04/044

DEPARTMENT: ELECTRICAL ENGINEERING

COURSE TITLE: ENGINEERING DRAWING

COURSE CODE: ENG 232

1. A cutting plane is represented on a drawing by a cutting plane line. This is a heavy long-short-short-long kind of line terminated with arrows. The arrows in show the direction of view. It is used to represent a sectioned surface on a drawing

2.

- Do not leave any size, shape, or material in doubt.
- To avoid confusion and the possibility of error, no dimension should be repeated twice on any sketch or drawing.
- Dimensions and notations must be placed on the sketch where they can be clearly and easily read.
- All dimension, extension, and leader lines should be thin, sharp, dark lines.
- Extension lines indicate the points between which the dimension figures apply. They are drawn perpendicular to the dimension lines, start with a visible gap between them and the object, and terminate beyond the last arrowhead.
- Each dimension should be terminated by arrowheads touching the extension lines and pointing in opposite directions. Arrowheads are drawn freehand with. The line should be broken only at the approximate center for the dimension figures.

3. HALF SECTION

A half-section is a view of an object showing one-half of the view in section, as in the drawing below. The diagonal lines on the section drawing are used to indicate the area that has been theoretically cut. These lines are called section lining or cross-hatching. The lines are thin and are usually drawn at a 45-degree angle to the major outline of the object.

FULL SECTION

If the imaginary cutting plane passes through the entire object, splitting the drawn object in two with the interior of the object revealed, this is called a "full section." A full section is the most widely-used sectional view.

4. A **leader line** is a thin **line** on a design or blueprint that is used to connect a dimension **line** with a particular area or point on the **drawing**. **leader line** is a thin straight **line** the leading from a dimension or an explanatory note of the **drawing**... Use arrow heads when leader lines terminate at the outline of an object. Use dots when leader lines terminate within the outline of the object or on the surface of the object.
5. Scale 5; A scale of 5:1 means that everything is to be drawn at 5 times the original size. A 50mm line is to be drawn at a scale of 5:1. The measurement 50mm is multiplied by 5 to give 250mm.

Scale 1:10; A drawing at a scale of 1:10 means that the object is 10 times smaller than in real life scale 1:1. This simply means that 1 unit in the drawing is equal to 10 units in reality.

6. SHAPE IDENTIFICATION SYMBOLS

Diameter = 

RADIUS= R

SQUARE= 

SPHERICAL RADIUS= SR

CENTRE LINE: A 'center line' is a **line**, often dashed and usually of a light (thin) **line** weight, **drawn** exactly through the axis of symmetry of a symmetrical object in the **drawing** to both denote that it is symmetrical, and to dimension the position of the **center** - such as for a circular or oval part of the plan. They are made from a series of lighter long and short dashes.

Objectives

1. To project the auxiliary view, an imaginary plane known as
b) Principle plane
2. Reference plane is parallel to the direction of view
b) False
3. Dimension of one side of the inclined surface can be.....projected
on the reference plane
c) Directly
4. In isometric projection the three edges of an object are inclined to each
other at
(b) 120°
5. The angle between the flanks of a metric thread is
(a) 60°
6. Which one among the following represents a permanent fastener
b) Rivet

7. The convexity provided on the rim of the solid web cast iron pulley is called

c) Crowning

8. Section lines are generally inclined with the base, at an angle of

b) 45°

9. The isometric view of a sphere is always

a) a circle

10. In isometric projection, the four center method is used to construct

a) an ellipse

11 c) cylinder

12. a) cone

13. A footstep bearing is a

a) journal bearing

14. The angle between the flanks of B.S.W. thread is

c) 55°

15. Top view is projected on the

d) Horizontal Plane

