**ENAYORU PROSPER SEROMU**

**CHEMICAL ENGINEERING**

**19/ENG01/018**

**ENG 231 ASSIGNMENT**

**OBJECTIVES**

1. Reference plane (A)
2. False (B)
3. Directly (C)
4. 120° (B)
5. 60° (A)
6. Rivet (B)
7. Crowing (C)
8. 45° (B)
9. A circle (A)
10. An Ellipse( A)
11. Cylinder (C)
12. Frustum (D)
13. Pivot bearing (C)
14. 53° (C)
15. Horizontal plane(D)

**THEORY**

1. To represent a sectioned surface on a drawing, you will show an area or hidden part of an object by cutting away or removing some of the object's sides; i.e When an object becomes more complex, as in the case of an automobile engine block, a clearer presentation of the interior can be made by sketching the object as it would look as if it were cut apart.
2. Rule 1:Dimensions should not be duplicated, nor should the same info be given in two different ways

Rule 2:Dimensions should be attached to the view that best shows the contour of the feature being dimensioned

Rule 3:Wherever possible avoid dimensioning to hidden lines

Rule 4:Avoid dimensions over or through the object

Rule 5:Wherever possible locate dimensions in adjacent views

Rule 6:In general a circle is measured by its diameter circle with line through it, and arc by its radius R0.50

Rule 7:Holes are located by their centrelines, which may be extended and used as an extension line

Rule 8:Holes should be located and sized in the view that shows that feature as a circle

1. **Half section:**  A half-section is a view of an object showing one-half of the view in section.

Full section: Thistypeofsection is one whichcutting plane line passes through the diameter of a cylinder.

1. These are thin continuous lines which are terminated by arrowheads touching the outlines, extension lines or centre lines.
2. A. 5:1 means 5 times more than its original size B. 1:10 means that the object is 10 times smaller than it actually is in real life scale 1:1. a The symbol or variable for diameter is Ø, specifications as a prefix or suffix for a number indicating that it represents diameter.
3. a The symbol or variable for diameter is Ø, specifications as a prefix or suffix for a number indicating that it represents diameter.
4. Consider the fact that objects that are far away are smaller than objects of the same size that are closer. **Orthographic projection** is a way of representing a three-dimensional object in two dimensions.
5. It is when the principal planes or axes of an object in an orthographicprojection are not parallel with the projection plane.
6. **First angle projection:** is a method of creating a 2D drawing of a 3D object. The symbol for firstangle orthographic projectionis;

**Third Angle projection:** is a method of orthographic projection which is a technique used to depict a 3D design using sequence of 2D views.