## THEORY

1. We use sectioning lines to represent sectioned surface on drawing, they are to be evenly placed and at an angle
2. Dimensions should not be duplicated, nor should the same info be given in two different ways.
a. Dimensions should be attached to the view that best shows the contour of the feature being dimensioned
b. Wherever possible avoid dimensioning to hidden lines
c. Avoid dimensions over or through the object
d. Wherever possible locate dimensions in adjacent views
e. In general a circle is measured by its diameter circle with line through it, and arc by its radius R0.50
f. Try to ensure that similar spacing are made between dimension lines as this gives a neat appearance on the completed drawing
3. HALF SECTION: Half-Sections. 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 crosshatching.
FULL SECTIONING: When the cutting plane is right across the object it results in a full sectional view commonly referred to as a full section.
4. A leader line can be terminated with the use of an arrow head
5. Scale $5: 1$ means that the object that should be drawn, should be enlarged 5 times

Scale 1:10 means that the drawing of an object should be reduced by 10 times
6. $\underline{\emptyset}$ - Diameter

R - Radius
7. Long break
7. ORTHOGRAPHIC PROJECTION:
a method of projection in which an object is depicted using parallel lines to project its outline on to a plane.
You require;
Side of the object
End of an object
8. A projection of an objection is called an orthographic projection when all the views of the object ae projected to all the side, end and front elevation
9. FIRST ANGLE PROJECTION

In this projection method, the object is placed in the first quadrant and is positioned in front of the vertical plane and above the horizontal plane.
THIRD ANGLE PROJECTION
object to be projected is placed in the third quadrant and is positioned behind the vertical plane and below the horizontal plane

| Projection | Symbol |
| :--- | :--- |
| First angle |  |

## OBJECTIVES.

1. $(A)$
2. (A)
3. (B)
4. (A)
5. (A)
6. (B)
7. (C)
8. (B)
9. (B)
10. (A)
11. (C)
12. (A)
13. (C)
14. (C)
15. (A)
