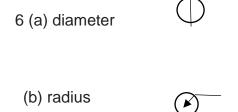1. Orthographically

2 (a) the dimension line must be 10cm from the object

(b) the dimension line must start and end with an arrowhead

(c) All dimension, extension, and leader lines should be thin, sharp, dark lines (.5mm/2H).

(d) Crossing of extension lines or dimension lines should be avoided if possible

(e) Where there are several parallel dimension lines in a group, the dimension figures should be staggered so that they will not interfere with one another.

3.(a) Half section: The cutting plane in this drawing extends the distance of the radius, or only **half** the distance of a **full section**, and is called a **half section**.

(b) full section: f the cutting plane had extended along the diameter of the cylinder, you would have been looking at a **full section**.

4   A leader line may be terminated in three different ways. Leader lines should be constructed such that there are ...

- no crossing leaders.
- no excessively long leaders.
- no leaders that are parallel to dimension or extension lines.
- no leaders that make a small angle with the surface to which it refers.

5.(a) the scale 5:1 represents that the scale is five times larger than the real object i.e for every 1 unit of the real measurement the drawing is going to be 5units

(b) the scale 1:10 represents that the scale is ten times smaller than the real object i.e for every ten unit in the real object is represented as one unit in the drawing.

6 (a) diameter

(b) radius

(c) square

(d) spherical radius

7. image of the object

  Dimensions

The plan in which we are seeing the object.

8. A projection of an object is called orthographic when one can see the front view, plan and end view.

9.(a) first angle projection: in the first angle, the plan is placed in the third quadrant while the side and front view is placed at the first and second quadrant respectively.

(b) Third angle projection: In the third angle, the plan is placed in the second quadrant while front and side view is placed in the third and fourth quadrant respectively.

OBJECTIVES

1 A

2 B

3 A

4 A

5 A

6 B

7 C

8 B

9 A

10 A

11 C

12 A

13 A

14 C

15 D