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MAT NO: 18/ENG03/031

DEPARTMENT:CIVIL ENGINEERING

OBJECTIVES

1) A

2) B

3) C

4) B

5) A

6) B

7) C

8) B

9) A

10) A

11) C

12) A

13) C

14) C

15) D

THEORY

1. A sectional view is represented by hatching, along the cutting plane at an eye angle of 45 degrees

2. Principles of dimensioning

- All dimensional information necessary to define a part clearly and completely shall be shown directly on a drawing.
- Each feature shall be dimensioned once only on a drawing.
- Dimensions shall be placed on the view or section that shows clearly, the corresponding features
- As far as possible, on a drawing, dimensions should be expressed in one unit only, preferably in millimeters, without showing the unit symbol (mm). Unit on the drawing, however, may be shown in a note
- No more dimensions than are necessary to define a part shall be shown on the drawing.
- No feature of a part shall be defined by more than one dimension in any one direction

3. HALF SECTION ; scale drawing of a section through a symmetrical object that shows only half the object

FULL SECTION ; this is a scale drawing of a section through a symmetrical object that show the full object

4. How are leader lines terminated ans :they can be terminated by the use of arrow head

5. scale = 5:1 this means a 50mm line is to be drawn at a scale of 5:1 that is 5 times more than the original size

Scale = 1:10 this means that the object is ten times smaller than in real life

6) Diameter: ϕ

Spherical diameter: $S\phi$

Radius : R

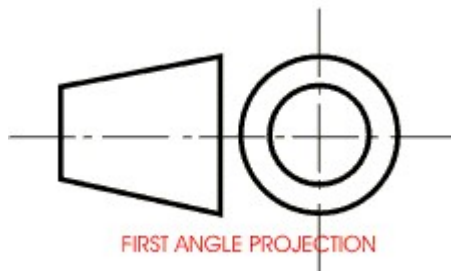
Spherical radius: SR

7. Orthographic projection is a method of producing a number of separate twodimensional inter-related views. These views are drawn mutually at right angles to each other. In engineering practice, orthographic

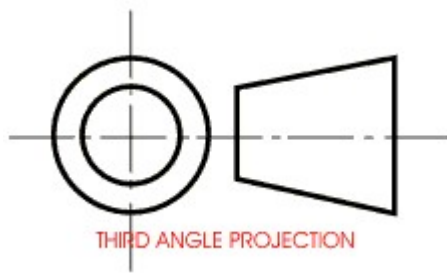
projection is universally used to represent solid objects by two dimensional views, as many as are necessary to give all the information needed, clearly and accurately

8. When is a projection of an object called an orthographic projection ; This is when a shape is seen from either a first angle projection, when the view is seen on either first or second angle projection showing the front elevation side elevation and plan

9.



In the first angle projection system, the object placed in the first quadrant In 1st angle, the object is between the observer and the plane of projection,



in third angle projection system the object placed in the third quadrant. In 3rd angle, the plane is between the observer and the object.