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MATRIC NO: 18/ENG02/010

DEPARTMENT: COMPUTER ENGINEERING

COURSE TITLE: ENG 232

1. How do you represent a sectioned surface on a drawing?

To represent a sectioned surface on a drawing lines are drawn at angle 45° and are spaced about $1/8$ apart

2. List out the various principles to be followed while dimensioning a drawing.

i) Each feature shall be dimensioned once only on a drawing

ii) Holes should be located and sized in the view that shows that feature as a circle

iii) Dimension should not be duplicated nor should be same info be given in two different ways

iv) Dimensions shall be placed on the view or section that shows clearly, the corresponding features

v) In general a circle is measured by it's its diameter

vi) Wherever possible locate dimensions in adjacent views

3. Explain the terms, (a) half section, (b) Full section

a) Half section: This a view of an object showing one half of the view in section

b) Full section: This is when the cutting plane passes through the object. it should be

noted that all visible edges behind the plane must be shown or the view will be incomplete. Hidden detail lines, however are not shown on a sectional view unless needed to describe object completely.

4. How are leader lines terminated?

By arrow terminators used to point to an edge of an item

By dot terminators used to point to a face

5. What do you understand by, (a) scale = 5:1 and (b) scale = 1:10?

a) Scale =5:1 the object will be 5 times bigger than it's original

b) Scale =1:10 means the original measurement is 10 times smaller

6. Give the shape identification symbols for the following: (a) diameter, (b) radius, (c) square and (d) spherical radius.

Centre line, (b) cutting plane line and (c) long break

(a) diameter: \emptyset or D

(b) Radius: r

(c) Square: SQ

(d) Spherical radius: SR

(e) Centre line: CL

(f) Cutting plane line: A-A,

7. What are the elements to be considered while obtaining a projection and what is an orthographic projection?

Length, width, and height/thickness

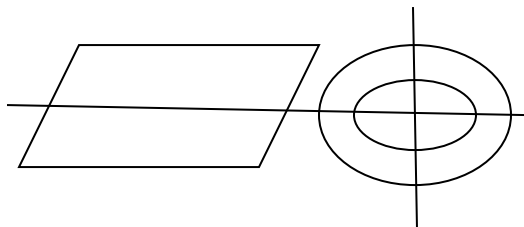
Orthographic projection: it is the means of representing three-dimensional object in two dimensions

8. When is a projection of an object called an orthographic projection?

When an object is drawn in form of 3D from different directions. Usually drawn on first or third angle

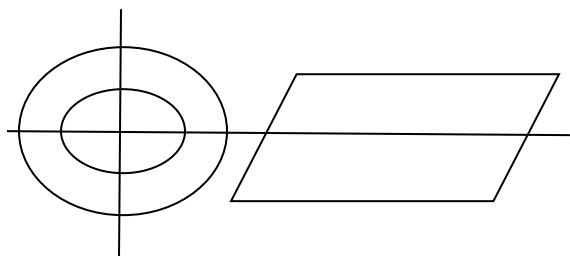
9. (a) First angle projection

This is a method of creating a 2D drawing of a 3D object



(b) Third angle projection

This is a method of orthographic projection which is a technique in portraying a 3D design using a series of 2D views



OBJECTIVES

1. D

2. B

3. C

4. B

5. A

6. B

7. C

8. B

9. A

10. A

11. C

12. A

13. B

14. C

15. D

