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18/ENG03/044

Civil engineering

ANSWERS

Question 1

A sectioned surface on a drawing is represented on a drawing using cutting lines , to show that it's been sectioned, and also cross hatches

QUESTION 2

RULES FOR DIMENSIONING

- *Dimension lines and extension lines should be narrow continuous lines 0.35mm thick, if possible, clearly placed outside the outline of the drawing
 - *The extension lines should not touch the outline of the drawing feature and a small gap should be left, about 2-3 mm, depending on the size of the drawing
 - *Arrow heads should be approximately triangular, must be uniform size and shape and in every case touch the dimension lines to which they refer. Arrow heads drawn manually should be filled in. arrow heads drawn by machine should not be filled in.
 - *Adequate space must be left between rows of dimensions and the actual of the dimension and the fact that there may be two numbers together where limits of size are quoted should be kept in mind.
 - *Center lines must never be used as dimension lines but must be left clear and distinct. They can be extended, however, with the use of extension lines.
- Dimensions should be quoted in millimeters to the minimum numbers of significant figures. For example 12 and not 12.0 and the case of decimal dimensions, a nought should always be used for example 0.4 and not .4.
- *Figures are to be kept so they can be read from the bottom of the drawing, or by turning the drawing in a clockwise direction, so that they can be read from right hand side and to enable them to be read clearly

QUESTION 3

TERMS:

HALF SECTION: a half section is one in which a sectioned view may be drawn in half of the figure and the outside may be drawn in the other half. It eliminates the necessity to introduce dot to lines for holes and the recess

FULL SECTION: This is one in which the entire object is sectioned along a particular axis

Question 4

HOW LEADER LINES ARE TERMINATED?

A leader line terminated either in an arrowhead or a dot. The arrowhead touches the outline, while the dot is placed within the outline of the outlined object.

QUESTION 5:

(a): Scale = 5:1

It also multiplying the measurement by the number in the front to give a bigger drawing.

(b): Scale = 1:10

This is used when making a smaller drawing.

QUESTION 6:

(a): Diameter- \varnothing

(b): Radius-R

(c): Square-

(d): Spherical radius-- $S\varnothing$

LINE: -----

CUTTING PLANE LINE: \uparrow _ _ _ _ \uparrow

LONG BREAK:

QUESTION 7

ELEMENTS TO BE CONSIDERED IN PROJECTION:

The projection angle

Type of projection

WHAT IS AN ORTHOGRAPHIC PROJECTION: This is a method of projection in which an object is depicted using parallel lines to project its outline on to a plane

QUESTION 8

WHEN IS A PROJECTION OF AN OBJECT CALLED AN ORTHOGRAPHIC PROJECTION:

It's when a three dimensional object is represented in two dimensional form that is a parallel projection, in which all the lines are orthogonal to the projection plane, resulting in every plane of the scene appearing in affine transformation on the viewing surface

QUESTION 9:

(a): First angle projection: First angle projection is a way of representing drawings in the first quadrant.

(b): Third angle projection: Third angle projection is a way of representing drawings in the third quadrant.

OBJECTIVES

1. a
2. b
3. b
4. a
5. b
6. C
7. B
8. B
9. A
10. C
11. A
12. c
13. c
14. d