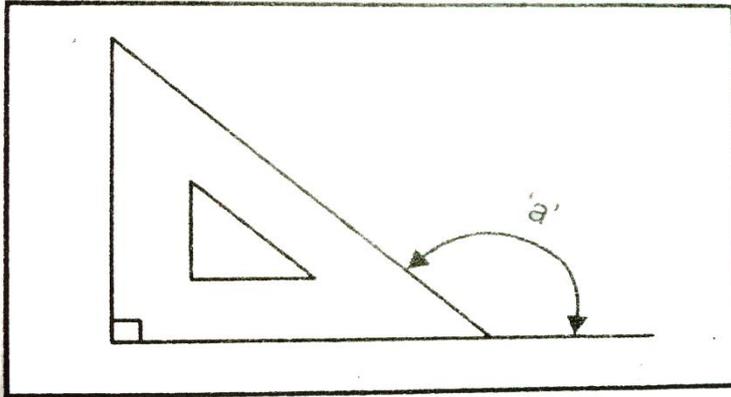


ENGINEERING DRAWING

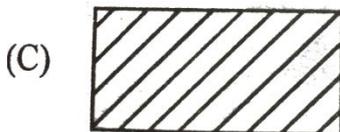
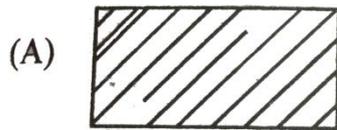
1. Set squares are used to draw different angles.



What is the angle 'a' formed by the 45° set square?

Give a brief answer.

2. Which is the correct method of hatching a plane surface?



Choose the correct answer

3. What is the name of triangle in which all three angles are less than 90°

Give brief answer.

4. Divide a 50 mm long line into five number of equal parts.

Give brief answer.

5. A plane engineering scale can read up to :

(A). One dimension

(B) Two dimension

(C) Three dimension

(D) Four dimension

Choose the correct answer

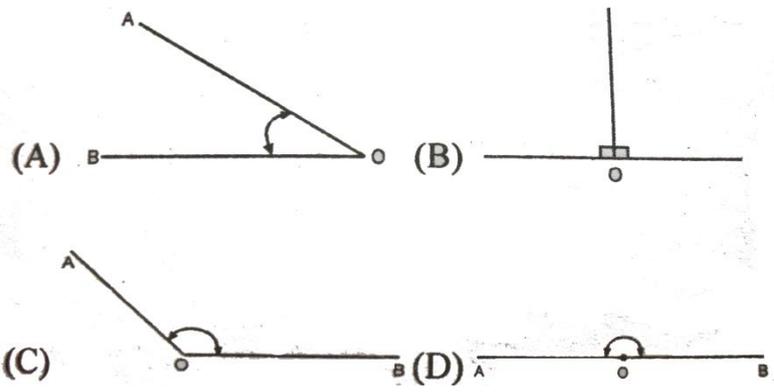
6. In Engineering Drawing pencils are graded according to the hardness and softness of the lead.

Which of the following pencils of the lead is hardest grade ?

- (A). 9H (B) HB (C) B (D) 7 B

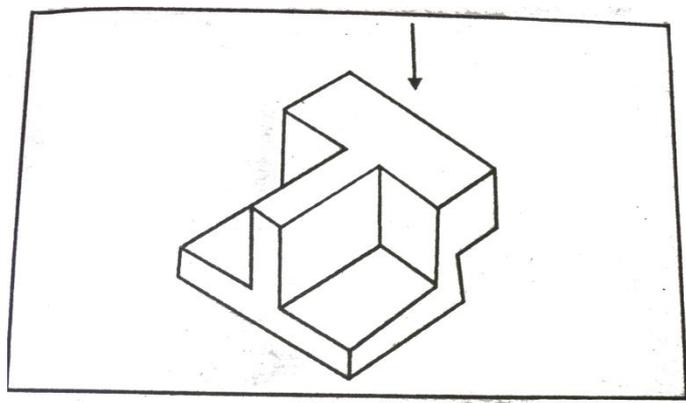
Choose the correct answer

7. Give Name and Identify the angle which is more than 90° and less than 180° ?



Choose the correct answer.

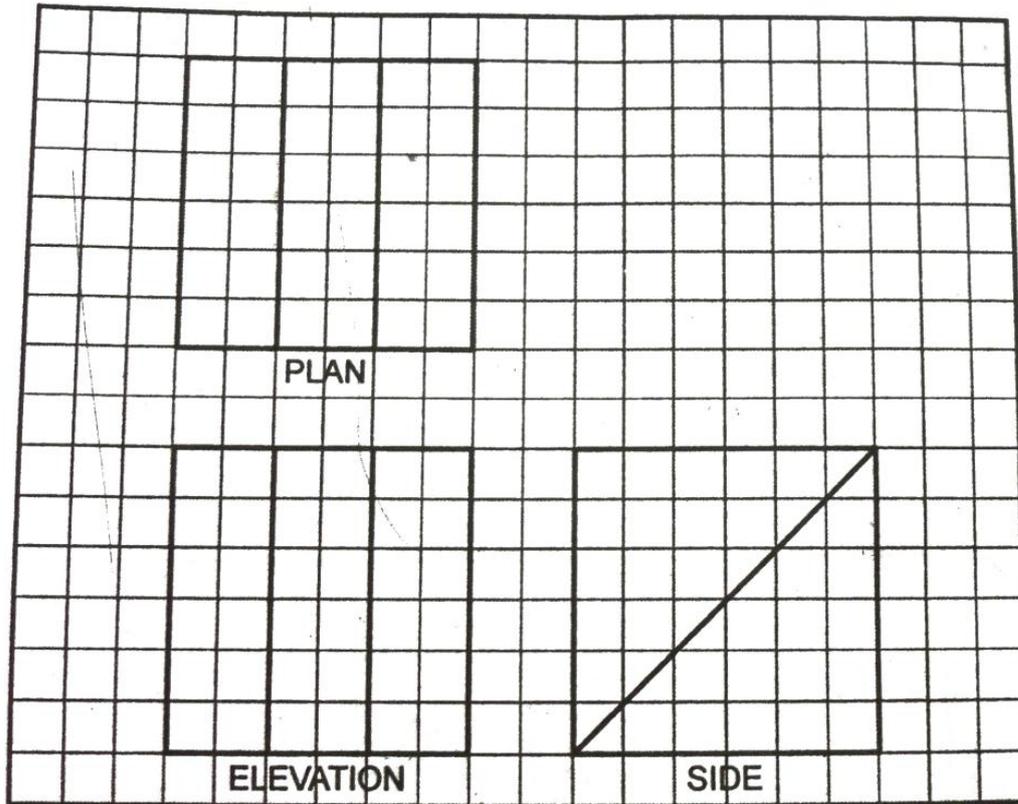
8. Choose the correct view are given below of Isometric drawing in the direction of arrow.



- (A) (B) (C) (D)

ENGINEERING DRAWING

9. Draw the Isometric view for the three views given in the third angle



10. Which of the following instrument is used for measuring angles.

- (A). Sclae (B) Set Square
(C) Protector (D) French Curve

Choose the correct answer

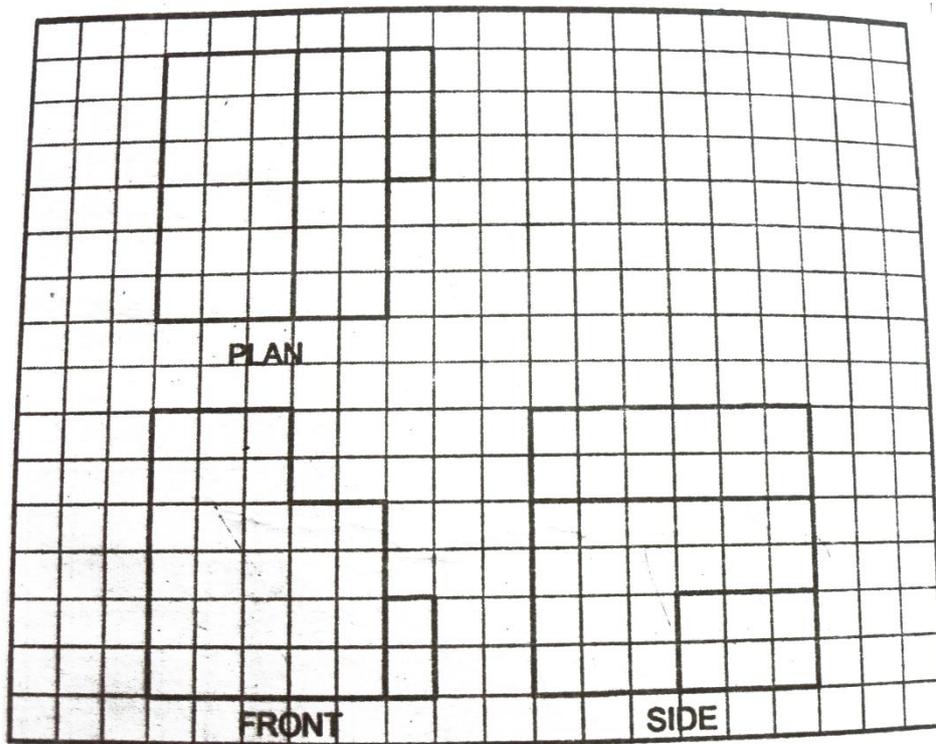
11. In which type of orthographic projection the top view of an object is drawn **below** the front view.

- (A). First angle projection (B) Third angle projection
(C) Second angle projection (D) Forth angle projection

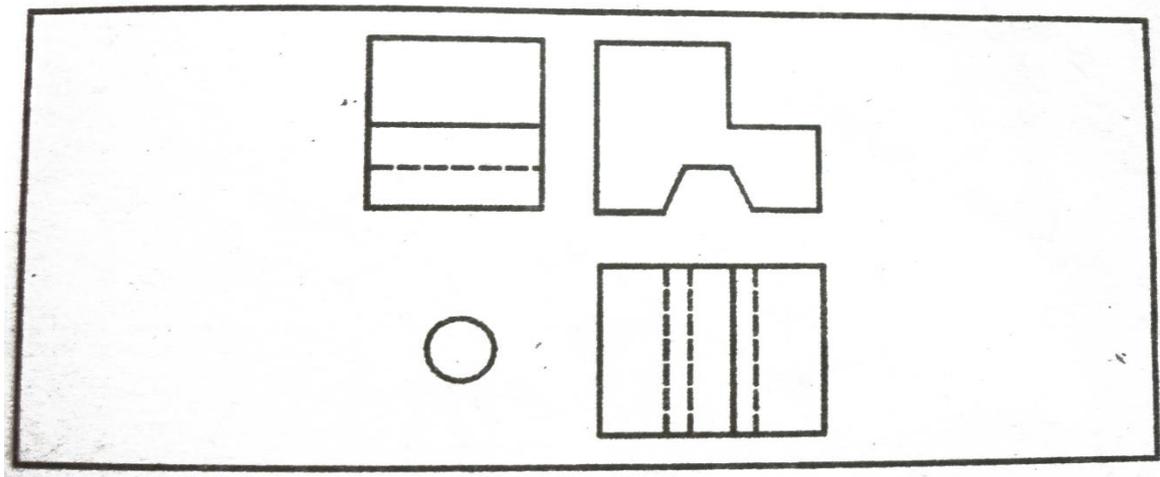
Choose the correct answer.

12. Draw a scalene triangle ABC in which the side AB = 30 mm, AC = 55 mm and BC = 35 mm (using compass)

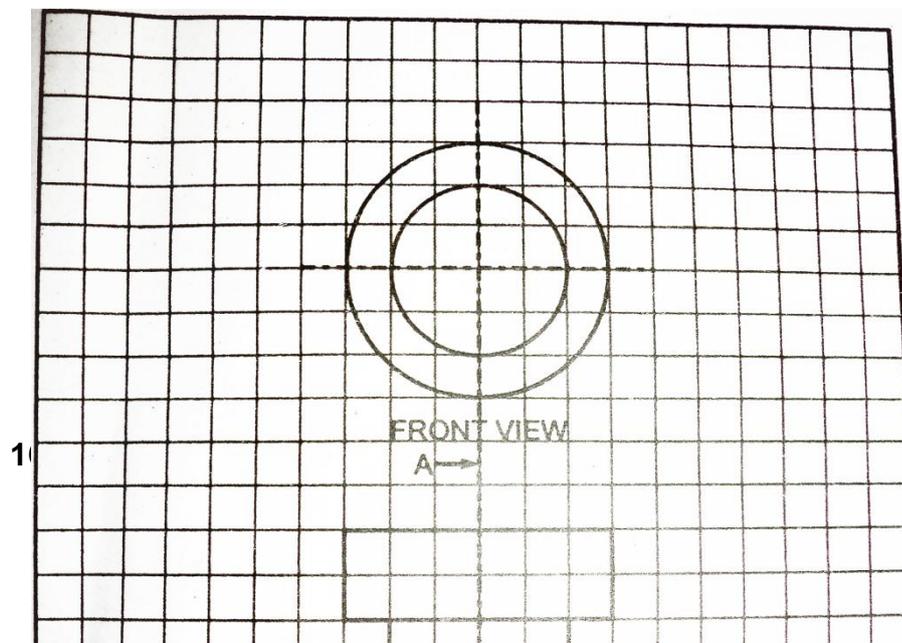
13. Draw the isometric view for the three view given in 3rd angle projection.



14. Identify the type of orthographic projection in given below projection.



15. Draw the left sectional side view along cutting plane AA.



ENGINEERING DRAWING

17. In the first angle projection the right side view is draw in :

- (A). Left side of the elevation
- (B) Right side of the elevation
- (C) Below the elevation.
- (D) Above the elevation

Choose the correct answer.

18. What is the name of part of a circular bound by the arc and chord?

Give a brief answer

19. Choose the correct name of key

- (A) Feather key
- (B) Round key
- (C) Sunk key
- (D) Peg key

Choose the correct answer

20. Which among the views can convey the true shape of an object on the drawing?

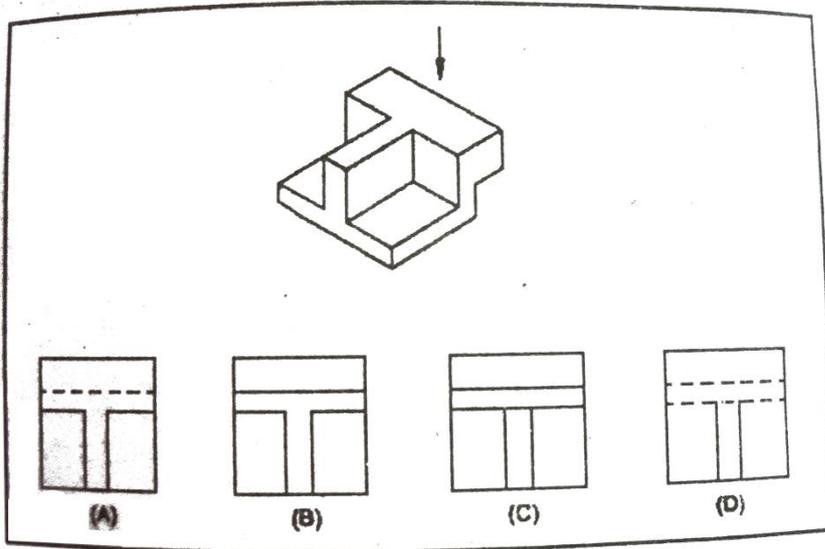
- (A) Isometric View
- (B) Orthographic view
- (C) Oblique view
- (D) Perspective view

Choose the correct answer

21. In which type of orthographic projection the left side or right side view of an object is drawn on the same side itself?

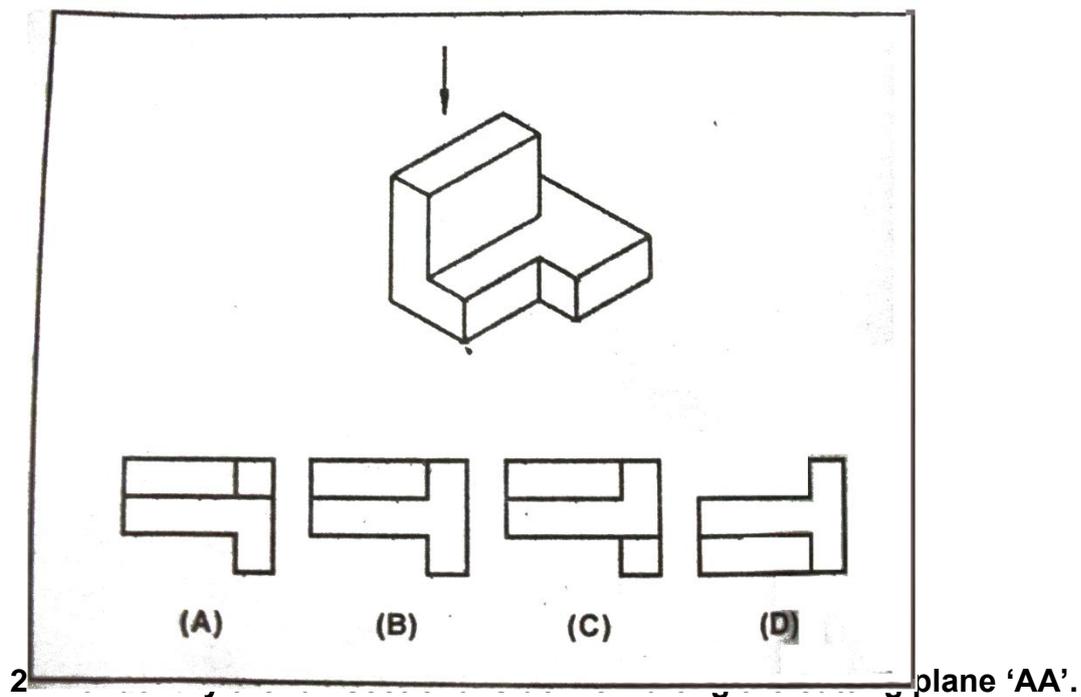
Give a brief answer.

22. Identify the correct top view as per the arrow mark in the isometric view of an object.



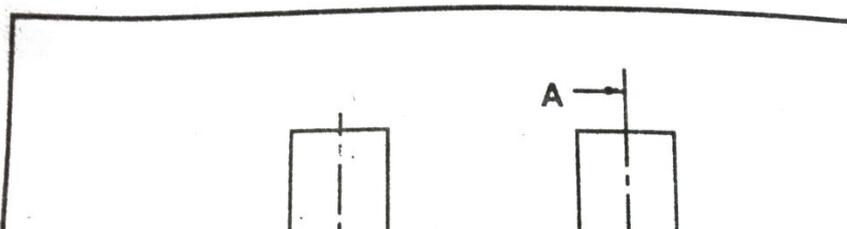
Choose the correct answer

23. To Identify the correct top view as per the arrow mark in the isometric view of an object.

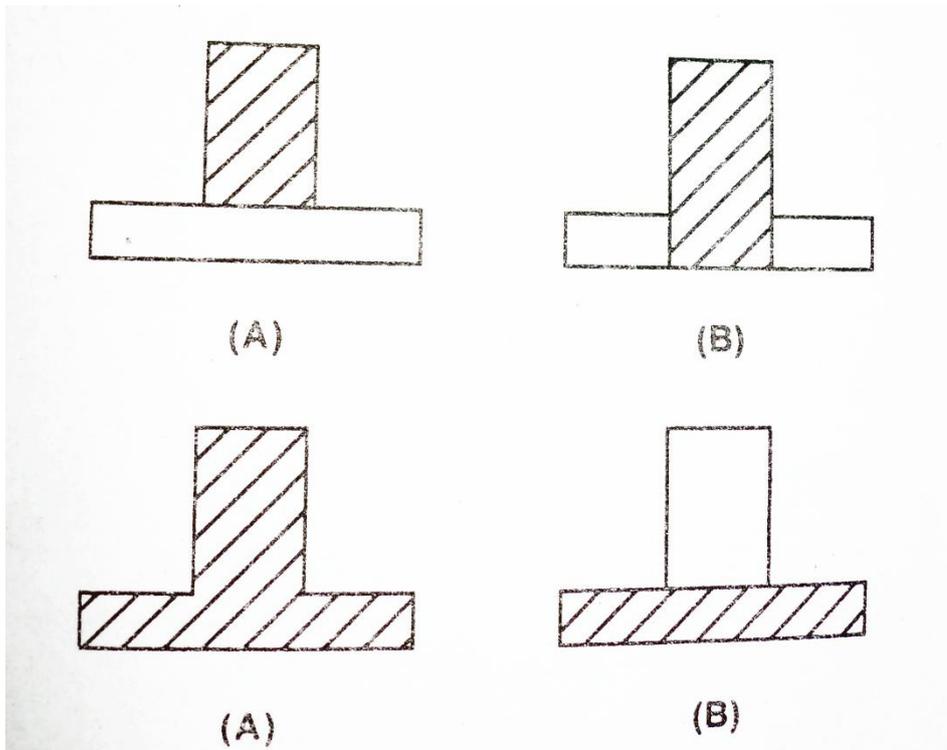


2

plane 'AA'.

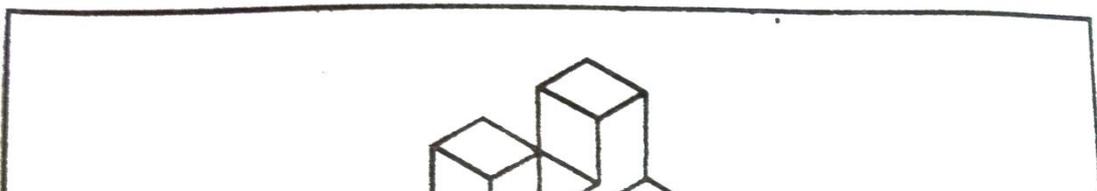


ENGINEERING DRAWING



Choose the correct answer

25. To Identify the correct front view as per the arrow mark in the isometric view of an object.



Choose the correct answer.

26. Hidden lines are drawn as

- (a) dashed narrow lines
- (b) dashed wide lines
- (c) long-dashed dotted wide line
- (d) long-dashed double dotted wide line

27. Line composed of closely and evenly spaced short dashes in a drawing represents

- (a) visible edges
- (b) hidden edges
- (c) hatching
- (d) pitch circle of gears

28. Lettering on a drawing sheet should have

- (a) all alphabets in capital letters
- (b) all alphabets in small letters
- (c) In a sentence only first alphabet in capital letter
- (d) In a sentence only abbreviations are capital letter

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- (a) dimension line
- (b) projection line
- (c) leader

ENGINEERING DRAWING

- (d) arrowheads

30. The dimension figure for radius of a circle should be preceded by

- (a) R
- (b) CR
- (c) SR
- (d) RAD

31. The recommended method of dimensioning a sphere with diameter 80 mm is

- (a) $80\phi S$
- (b) $\phi 80S$
- (c) $S80\phi$
- (d) $S\phi 80$

32. Methods of arrangement of dimensions includes

- (a) Parallel, continuous and combined
- (b) Perpendicular, parallel and combined
- (c) Perpendicular, continuous and combined
- (d) Perpendicular, parallel and continuous

33. Superimposed dimensioning is a simplified method of

- (a) chain dimensioning
- (b) parallel dimensioning
- (c) combined dimensioning
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34. A curve drawn for Boyle's law ($PV = \text{constant}$) on a P-V chart has a characteristic shape of

- (a) ellipse
- (b) parabola
- (c) oblique hyperbola
- (d) rectangular hyperbola

35. The profile of a gear teeth is in the form of

- (a) parabola
- (b) involute
- (c) spiral
- (d) helix

36. When two angles together make 90° , they are called

- (a) obtuse angle
- (b) reflex angle
- (c) complementary angles
- (d) supplementary angles

37. The included angle of a hexagon is

- (a) 30°
- (b) 60°
- (c) 120°
- (d) 150°

38. The curve generated by a point on the circumference of a circle, which rolls without slipping along outside of another circle is known as

- (a) Hypocycloid
- (b) Epicycloid
- (c) Cycloid
- (d) Trochoid

39. In orthographic projections, the rays are assumed to

- (a) diverge from station point
- (b) converge from station point
- (c) be parallel
- (d) None of these

40. If an object lies in third quadrant, its position with respect to reference planes will be

- (a) in front of V.P, above H.P
- (b) behind V.P., above H.P.
- (c) behind V.P., below H.P.
- (d) in front of V.P., below H.P.

ENGINEERING DRAWING

41. If the Vertical Trace (V.T.) of a line lies 30 mm above reference line (XY), then its position will be

- (a) 30 mm in front of V.P.
- (b) 30 mm behind V.P.
- (c) 30 mm above H.P.
- (d) 30 mm below H.P.

42. When an object is cut by a section plane parallel to H.P and perpendicular to V.P, then the sectional view of the object is obtained in

- (a) top view
- (b) front view
- (c) left side view
- (d) right side view

43. Which of the following object gives a circular section, when it is cut completely by a section plane (irrespective of the angle of the section plane)

- (a) Cylinder
- (b) Sphere
- (c) Cone
- (d) Circular lamina

44. Comparative scale is a pair of scale having a common

- (a) units
- (b) representative fraction
- (c) length of scale
- (d) least count

45. An angle can be set off and measured with the help of

- (a) plane scale
- (b) diagonal scale
- (c) comparative scale
- (d) Scale of chords

46. All of the following statements about multiview drawings are

true, except:

- A) each view is a 3-D pictorial image
 - B) based on orthographic projection
 - C) at least two views of the object
 - D) views are defined by planes of projection
-

47. Which type of projection does not have the projection rays parallel to each other?

- A) axonometric projection
- B) oblique projection
- C) orthographic projection
- D) perspective projection

48. Which is not a principal view?

- A) bottom
 - B) left side
 - C) auxiliary
 - D) front
-

49. Principle planes will appear as:

- A) normal planes or edges

ENGINEERING DRAWING

- B) oblique planes or edges
 - C) normal planes or oblique planes
 - D) skewed planes or edges
-

50. In orthographic projection, visual rays or lines of sight for a given view are _____ to each other.

- A) perpendicular
 - B) oblique
 - C) normal
 - D) parallel
-

51. What two types of projections give a pictorial view of the object without convergence?

- A) orthographic and perspective
 - B) oblique and axonometric
 - C) perspective and oblique
 - D) isometric and orthographic
-

52. Inclined planes in a three-view drawing will appear as:

- A) two surfaces and one edge

- B) two edges and one surface
 - C) three edges
 - D) foreshortened in each view
-

53. Oblique planes in a three-view drawing will appear as:

- A) two surfaces and one edge
 - B) two edges and one surface
 - C) three edges
 - D) three surfaces
-

54. Normal planes in a three-view drawing will appear as:

- A) one surface and two edges
 - B) three surfaces
 - C) one edge and two surfaces
 - D) three edges
-

55. A viewing direction which is perpendicular to the surface in question gives a(n) _____ view.

- A) inclined
- B) normal

ENGINEERING DRAWING

- C) oblique
 - D) perspective
-

56. A viewing direction which is parallel to the surface in question gives a(n) _____ view.

- A) inclined
 - B) normal
 - C) edge
 - D) perspective
-

57. When a surface of an object is inclined to a plane of projection, it will appear _____ in the view.

- A) foreshortened
 - B) in true size and shape
 - C) as a line
 - D) as a point
-

58. What are the three principle planes in orthographic projection?

- A) front, top, profile
- B) back, top, profile

- C) top, front, right side
 - D) frontal, horizontal, profile
-

59. The top view of an object should typically be drawn:

- A) to the right of the front view.
 - B) anywhere on the same page.
 - C) directly above the front view.
 - D) on a separate piece of paper.
-

60. A horizontal surface of a multiview drawing will appear as a(n) _____ in the front view.

- A) edge
 - B) normal surface
 - C) point
 - D) foreshortened surface
-

61

Which view is usually developed first, contains the least amount of hidden lines, and shows the most contours in multiview drawings?

- A) right side
- B) top

ENGINEERING DRAWING

- C) back
- D) front

62

A sphere can be described in how many views?

- A) 4
- B) 3
- C) 2
- D) 1

63

An asymmetric object is usually described by how many views?

- A) 6
- B) 3
- C) 4
- D) 2

64

An axially symmetric object, such as one turned on a lathe, normally can be shown in _____ view(s).

- A) one
- B) two
- C) three
- D) four

65

In orthographic projection, visual rays are _____ to the projection plane.

- A) parallel
- B) adjacent
- C) perpendicular
- D) tangent

66

The top and right side views have what common dimension(s)?

- A) height and width
- B) width and depth
- C) height
- D) depth

67

For orthographic projection, the engineering custom in the United States dictates the use of:

- A) first-angle projection
- B) second-angle projection
- C) third-angle projection
- D) fourth-angle projection

68

For orthographic projection, the engineering custom in Europe dictates the use of:

- A) first-angle projection
- B) second-angle projection

ENGINEERING DRAWING

- C) third-angle projection
- D) fourth-angle projection

69

The sequence for the direction of view (or line of sight) for any orthographic projection as utilized in the United States is:

- A) eye of observer>projection plane>object
- B) eye of observer>object>projection plane
- C) projection plane>object>eye of observer
- D) projection plane>eye of observer>object

70

Depending on its relationship to the projection plane on which the view is projected, a line may project:

- A) true length
- B) foreshortened
- C) as a point
- D) all of the above

71

If a surface on an object is parallel to one of the principal planes of projection, then the angular relationship of that surface to at least two other principal projection planes is:

- A) parallel
- B) perpendicular
- C) inclined
- D) unknown

72

Good practice dictates that the characteristic contour shape of the object be shown in what view?

- A) top
- B) front
- C) right side

- D) any side

73

The height, width, and depth of an object can be shown with a minimum of how many orthographic projection views?

- A) six
 B) three
 C) two
 D) four

74

Which of the following pairs of orthographic views both show the height dimension?

- A) left side and front
 B) top and front
 C) top and rear
 D) bottom and right side

75. The line traced by a point which always changes its direction is a

- (A) Straight line
(B) Curved line
(C) inclined line
(D) parallel line

76. Which of the following instrument is used for measuring angle.

- (A) Scale (B) Set square
(C) Protector (D) French Curve

77. In which type orthographic projection the top view of an object is drawn below the front view.

- (A) First angle projection (B) Third angle projection
(C) Second angle projection (D) Fourth angle projection

78. In the first angle projection the right side view is drawn in : (Choose the correct answer)

- (A) Left side of the elevation
(B) Right side of the elevation

ENGINEERING DRAWING

(C) Below the elevation

(D) Above the elevation

79. What is the name of part of a circle bound by the are and chord?

(A) Seagment (B) Root

(C) Blade (D) Bounded

80. Which among the views can convey the true shape of an object on the drawing ?

(A) Isometric view

(B) Orthographic view

(C) Oblique view

(D) Perspective view

81. Which of the following instrument is used for measuring angle .

(A) Scale (B) Protector

(C) Set square (D) French curve

83. In the 1st angle projection the right side view is draw in :-

(A) Left side of the elevation (B) Right side of the elevation

(C) Below the elevation (D) Above the elevation

84. What is the name of part of a circle bound by the are and chord .

(A) Seagment (B) Root

(C) Blade (D) Bounded

85. The projection showing the front in the true shape and size is

- (a) isometric
- (b) perspective
- (c) oblique
- (d) axonometric

86. What type of line has precedence over all other types of lines?

- (a) hidden line
- (b) centre line
- (c) visible line

- (d) none of the above

87. Which is not a principal view?

- (a) front
- (b) bottom
- (c) auxiliary
- (d) left side

88. Inclined planes in a three-view drawing will appear as

- (a) two surfaces and one edge
- (b) one surface and two edges
- (c) three edges
- (d) foreshortened in each view

89. When a surface of an object is inclined to a plane of projection, it will appear in the view

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- (a) to the right of the front view
- (b) directly below the front view
- (c) anywhere on the same page
- (d) on a separate piece of paper

90. The top and right side views have common dimensions of

- (a) height and width
- (b) width and depth
- (c) height
- (d) depth

91. This type of projection is when projectors are parallel to each other, but are at an angle other than 90 degrees to the plane of projection:

- (a) perspective

ENGINEERING DRAWING

- (b) oblique
- (c) aesthetic
- (d) angular

92. This is how axonometric, oblique, and perspective sketches show objects

- (a) Orthographically
- (b) Pictorially
- (c) Obliquely
- (d) Parallel

93. The primary unit of measurement for engineering drawings and design in the mechanical industries is the

- (a) millimeter
- (b) centimeter
- (c) meter
- (d) kilometer

94. This type of solid has two bases that are parallel equal polygons:

- (a) pyramid
- (b) prism
- (c) cone
- (d) torus

95. The solid having a polygon for a base and triangular lateral faces intersecting at a vertex is

- (a) pyramid
- (b) prism
- (c) cone
- (d) torus

96. This is formed where three or more surfaces intersect:

- (a) oblique
- (b) line
- (c) edge
- (d) verte

97. These types of projectors converge at a vanishing point

- (a) perspective
- (b) parallel
- (c) orthographic
- (d) oblique

98. In oblique sketches, the most commonly used angles for receding lines are

- (a) 15 or 60 degrees
- (b) 15 or 75 degrees
- (c) 45 or 60 degrees
- (d) 45 or 75 degrees

99. Objects that are symmetric can be shown effectively using this type of section

- **(a) quarter section**
- (b) half section
- (c) full section
- (d) symmetric section

100. In this type of section, one quarter of the object is removed

- (a) revolved section
- (b) removed section
- (c) quarter section
- (d) half section

101. This type of section is limited by a break line

- (a) removed section
- (b) revolved section
- (c) broken-out section
- (d) half section

102. This type of section is not in direct projection from the view containing the cutting plane

- (a) revolved section
- (b) removed section
- (c) broken-out section

ENGINEERING DRAWING

- (d) full section

103. An axonometric projection in which three perpendicular edges of the object make different angles with the plane of projection is called

- (a) isometric projection
- (b) diametric projection
- (c) trimetric projection
- (d) oblique projection

104. In an isometric projection, the included angle between the edges of a cube is

- (a) 30°
- (b) 60°
- (c) 90°
- (d) 120°

105. The axonometric drawing having equal foreshortening along two axis directions and a different amount on the third axis is called

- (a) dimetric
- (b) trimetric
- (c) isometric
- (d) multiview

107. In an isometric drawing, lines that are not parallel to the isometric axes are called

- (a) dimetric lines
- (b) trimetric lines
- (c) non-isometric lines
- (d) multiview lines

108. The axonometric drawing having different ratios of foreshortening for all the three axes is called

- (a) dimetric
- (b) trimetric
- (c) isometric

- (d) multiview

109. When the projectors are at 45° to the plane of projection and the receding lines are true length, it is called

- (a) cabinet projection
- (b) cavalier projection
- (c) axonometric projection
- (d) perspective projection

110. Perspective drawings are classified according to their number of these features

- (a) station points
- (b) picture planes
- (c) vanishing points
- (d) ground lines

111. In offset sections, offsets or bends in the cutting plane are all:

- (a) 90 degrees
- (b) 180 degrees
- (c) Either 90 or 180 degrees
- (d) 30, 60, or 90 degrees

112. These breaks are used to shorten the view of an object:

- (a) Section breaks
- (b) Aligned breaks
- (c) Conventional breaks
- (d) Full breaks

113. Hidden lines are drawn as

- (a) dashed narrow lines
- (b) dashed wide lines
- (c) long-dashed dotted wide line
- (d) long-dashed double dotted wide line

114. Line composed of closely and evenly spaced short dashes in a drawing represents

- (a) visible edges

ENGINEERING DRAWING

- (b) hidden edges
- (c) hatching
- (d) pitch circle of gears

115. Lettering on a drawing sheet should have

- (a) all alphabets in capital letters
- (b) all alphabets in small letters
- (c) In a sentence only first alphabet in capital letter
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116. The line connecting a view to note is called

- (a) dimension line
- (b) projection line
- (c) leader
- (d) arrowheads

117. The dimension figure for radius of a circle should be preceded by

- (a) R
- (b) CR
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118. The recommended method of dimensioning a sphere with diameter 80 mm is

- (a) $80\phi S$
- (b) $\phi 80S$
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- (a) Parallel, continuous and combined
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ENGINEERING DRAWING

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- (a) diverge from station point
- (b) converge from station point
- (c) be parallel
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127. If an object lies in third quadrant, its position with respect to reference planes will be

- (a) in front of V.P, above H.P
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- (c) behind V.P., below H.P.
- (d) in front of V.P., below H.P.

128. If the Vertical Trace (V.T.) of a line lies 30 mm above reference line (XY), then its position will be

- (a) 30 mm in front of V.P.
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- (c) 30 mm above H.P.
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- (a) top view
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- (a) units
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- (d) least count

132. An angle can be set off and measured with the help of

- (a) plane scale
- (b) diagonal scale
- (c) comparative scale
- (d) Scale of chords

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- (a) isometric
- (b) perspective
- (c) oblique
- (d) axonometric

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- (d) foreshortened in each view

137. When a surface of an object is inclined to a plane of projection, it will appear in the view

ENGINEERING DRAWING

- (a) foreshortened
- (b) in true size and shape
- (c) as a line
- (d) as a point

138. The top view of an object should typically be drawn

- (a) to the right of the front view
- (b) directly below the front view
- (c) anywhere on the same page
- (d) on a separate piece of paper

139. The top and right side views have common dimensions of

- (a) height and width
- (b) width and depth
- (c) height
- (d) depth

140. This type of projection is when projectors are parallel to each other, but are at an angle other than 90 degrees to the plane of projection:

- (a) perspective
- (b) oblique
- (c) aesthetic
- (d) angular

141. This is how axonometric, oblique, and perspective sketches show objects

- (a) Orthographically
- (b) Pictorially
- (c) Obliquely
- (d) Parallel

142. The primary unit of measurement for engineering drawings and design in the mechanical industries is the

- (a) millimeter
- (b) centimeter
- (c) meter

- (d) kilometer

143. This type of solid has two bases that are parallel equal polygons:

- (a) pyramid
- (b) prism
- (c) cone
- (d) torus

144. The solid having a polygon for a base and triangular lateral faces intersecting at a vertex is

- (a) pyramid
- (b) prism
- (c) cone
- (d) torus

145. This is formed where three or more surfaces intersect:

- (a) oblique
- (b) line
- (c) edge
- (d) vertex

146. These types of projectors converge at a vanishing point

- (a) perspective
- (b) parallel
- (c) orthographic
- (d) oblique

147. In oblique sketches, the most commonly used angles for receding lines are

- (a) 15 or 60 degrees
- (b) 15 or 75 degrees
- (c) 45 or 60 degrees
- (d) 45 or 75 degrees

148. Objects that are symmetric can be shown effectively using this type of section

- (a) quarter section
- (b) half section

ENGINEERING DRAWING

- (c) full section
- (d) symmetric section

149. In this type of section, one quarter of the object is removed

- (a) revolved section
- (b) removed section
- (c) quarter section
- (d) half section

150. This type of section is limited by a break line

- (a) removed section
- (b) revolved section
- (c) broken-out section
- (d) half section

151. This type of section is not in direct projection from the view containing the cutting plane

- (a) revolved section
- (b) removed section
- (c) broken-out section
- (d) full section

152. An axonometric projection in which three perpendicular edges of the object make different angles with the plane of projection is called

- (a) isometric projection
- (b) diametric projection
- (c) trimetric projection
- (d) oblique projection

153. In an isometric projection, the included angle between the edges of a cube is

- (a) 30°
- (b) 60°
- (c) 90°
- (d) 120°

154. The axonometric drawing having equal foreshortening along two axis directions and a different amount on the third axis is called

- (a) dimetric
- (b) trimetric
- (c) isometric
- (d) multiview

155. In an isometric drawing, lines that are not parallel to the isometric axes are called

- (a) dimetric lines
- (b) trimetric lines
- (c) non-isometric lines
- (d) multiview lines

156. The axonometric drawing having different ratios of foreshortening for all the three axes is called

- (a) dimetric
- (b) trimetric
- (c) isometric
- (d) multiview

157. When the projectors are at 45° to the plane of projection and the receding lines are true length, it is called

- (a) cabinet projection
- (b) cavalier projection
- (c) axonometric projection
- (d) perspective projection

158. Perspective drawings are classified according to their number of these features

- (a) station points
- (b) picture planes
- (c) vanishing points
- (d) ground lines

159. In offset sections, offsets or bends in the cutting plane are all:

- (a) 90 degrees

ENGINEERING DRAWING

- (b) 180 degrees
- (c) Either 90 or 180 degrees
- (d) 30, 60, or 90 degrees

160. These breaks are used to shorten the view of an object:

- (a) Section breaks
- (b) Aligned breaks
- (c) Conventional breaks
- (d) Full breaks