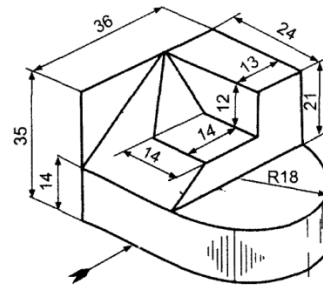


Subjective questions on MET – 04

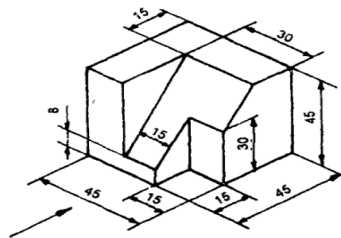
1. What is engineering drawing and its role?
2. What are the various writing instruments and other aids used in drafting work? Describe its uses.
3. Write short note on following
 - a) drawing board
 - b) Mini draughter
 - c) Pencils
 - d) drawing sheets
4. Specify various types of lines and their applications.
5. What is lettering and its main features?
6. What are dimensioning, and its principles?
7. What is the various arrangement of dimensions?
8. Define reducing and enlarging scales. What are the various types of scales?
9. On a survey map the distance between two places 1 km apart is 5 cm. Construct the scale to read 4.6 km.
10. Divide a 100 mm straight line into 6 numbers of equal parts.
11. Divide a 120 mm straight line into 7 numbers of equal parts.
12. Divide a 150 mm straight line into 7 numbers of equal parts.
13. Bisect 65 degree angle.
14. Bisect 75 degree angle.
15. Inscribe a square in a 60 mm diameter circle.
16. Inscribe a square in a 80 mm diameter circle.
17. Inscribe a square in a 80 mm diameter circle.
18. Draw an ellipse whose major and minor diameters are 120 mm and 80 mm respectively
19. Draw an ellipse whose major and minor diameters are 150 mm and 100 mm respectively.
20. Draw a parabola whose focus is at a distance of 50 mm from directrix.

21. Draw a parabola whose focus is at a distance of 60 mm from directrix.
22. Draw a parabola whose focus is at a distance of 70 mm from directrix.
23. Draw a parabola whose focus is at a distance of 80 mm from directrix
24. Point A is 40 mm above HP and 60 mm in front of VP draw its front and top view.
25. Draw the projections of a point A lying on HP and 25 mm in front of VP
26. A line ab 50mm long is perpendicular to VP and parallel to HP. its end a is 20 mm in front of VP and the line is 40 mm above HP draw the projections of the line.
27. A line AB 30 mm long is parallel to both the plane. The line is 40 mm above HP and 20 mm in front of VP draw its projection.
28. A line AB 40 mm long is parallel to VP and inclined at an angle of 30 degree to HP the end A is 15 mm above HP and 20 mm in front of VP draw the projections of the line.
29. A line AB of 25 mm long is perpendicular to HP and parallel to VP the end point a and b of the line are 35 mm and 10 mm above HP respectively the line is 20 mm in front of VP draw the projections of the line.
30. A triangular prism with side of this 35 mm and axis 50 mm long is resting on its base on HP. Draw the projection of the prism when one of its rectangular faces is perpendicular to VP and the nearest edge parallel to VP is 10 mm from it.
31. Draw the projection of a cone with diameter of the axis 40 mm and axis 70 mm long with its apex on hp and 35 mm from VP the access is perpendicular to HP.
32. Draw the isometric projection of rectangle of 100 mm and 70mm. sides if its plane a) vertical b)horizontal
33. Draw the isometric view of square prism with a side of base 30 mm and axis 50 mm long when the axis is a) Vertical and b) Horizontal.

34. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection.

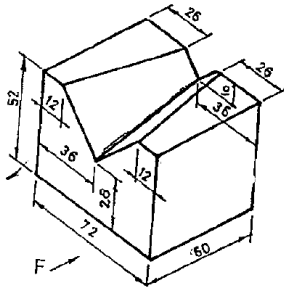


35. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection.

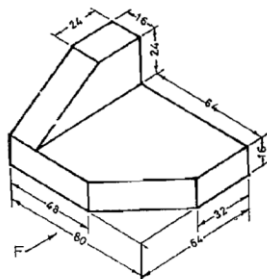


36. Construct a scale of 1:50 to read metres and decimetres and long enough to Measure 6 m. Mark on it a distance of 5.5 m.
37. The distance between two towns is 250 km and is represented by a line of length 50mm on a map.
38. Construct a scale to read 600 km and indicate a distance of 530 kmon it.
39. Construct a plain scale of convenient length to measure a distance of 1 cm and mark on it a distance of 0.94 cm.
40. On a plan, a line of 22 Cm long represents a distance of 440 metres. Draw a diagonal scale for the plan to read upto a single metre. Measure and mark a distance of 187m on the scale.
41. Divide a 120 mm line in the ratio 1 : 3 : 4.
42. Inscribe a hexagon in a 60 mm diameter circle.
43. Draw an arc of given radius touching two straight lines at right angles to each other.
44. Draw an arc of a given radius, touching two given straight lines making an angle 60° between them.

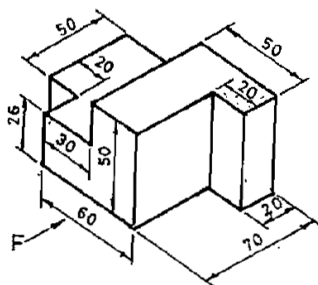
45. Draw the projections of a point A lying on VP and 70 mm above HP.
46. A Point B is 30 mm above HP and 40 mm behind VP Draw its projection.
47. A point C is 40 mm below HP and 30 mm behind VP Draw its projection.
48. Point A is 40 mm above HP and 60 mm in front of VP Draw its front and top view.
49. Draw the projections of a point A lying on HP and 25mm in front of VP
50. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection.



51. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection.



52. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection.



53. The distance between two towns is 250 km and is represented by a line of length 50mm on a map. Construct a scale to read 600 km and indicate a distance of 530 km on it.

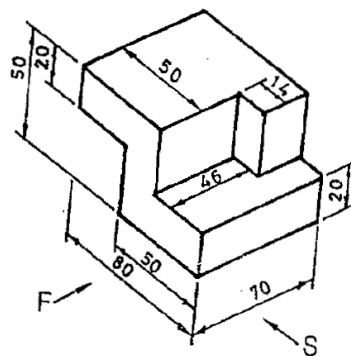
54. The distance between Delhi and Agra is 200 km. In a railway map it is represented by a line 5 cm long. Find its R.F. Draw a diagonal scale to show single km. And maximum 600 km. Indicate on it following distances. 1) 222 km 2) 336 km 3) 459 km 4) 569 km

55. A Square Pyramid, having base with a 40 mm side and 60mm axis is resting on its base on the HP. Draw its Projections when (a) a side of the base is parallel to the VP. (b) A side of the base is inclined at 30° to the VP and (c) All the sides of base are equally inclined to the VP.

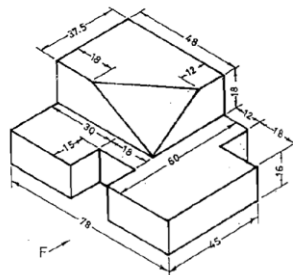
55. A pentagonal Prism having a base with 30 mm side and 60mm long Axis, has one of its bases in the VP. Draw Its projections When (a) rectangular face is parallel to and 15 mm above the HP (b) A rectangular face perpendicular to HP and (c) a rectangular face is inclined at 45° to the HP

56. A Hexagonal Prism having a base with a 30 mm side and 75 mm long axis, has an edge its base on the HP. Its axis is Parallel to the VP and inclined at 45° to the HP Draw its projections?

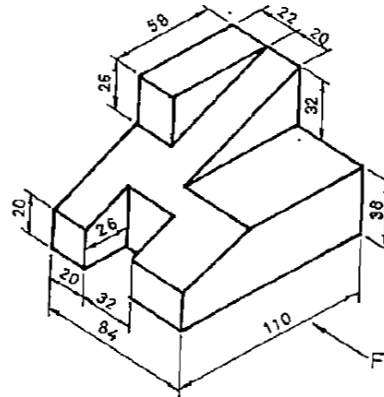
57. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection



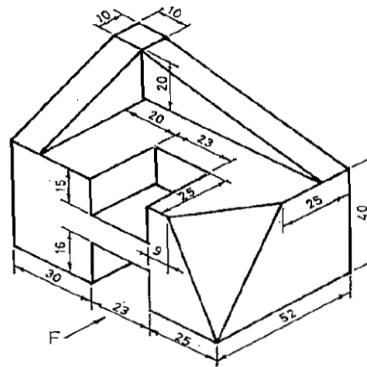
58. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection



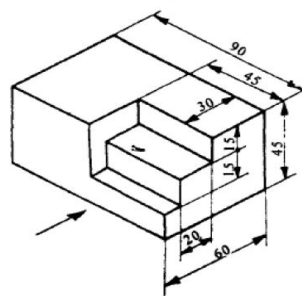
59. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection



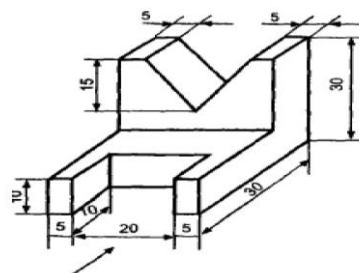
60. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection



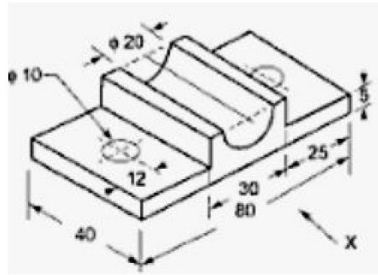
61. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection



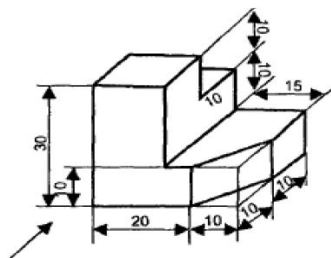
62. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection



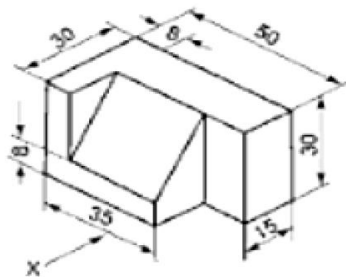
63. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection



64. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection



65. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection



66. Consider the picture shown in figure and draw the front view, top view and side view in first angle projection

