

ANSWER KEY – CLASS 11 – EG – AT -2 – SET 1 – 2023 – 24

20 x 1 = 20

SECTION – A

Q.NO	ANSWERS
1	b. Engineering graphics
2	b. First quadrant
3	d. Continuous thick line
4	c)
5	b) Square pyramid and axis perpendicular to VP
6	a) Vertical section plane
7	d) Left side view and represent at right side of front view
8	a) 1-iii, 2-iv, 3-ii, 4-i

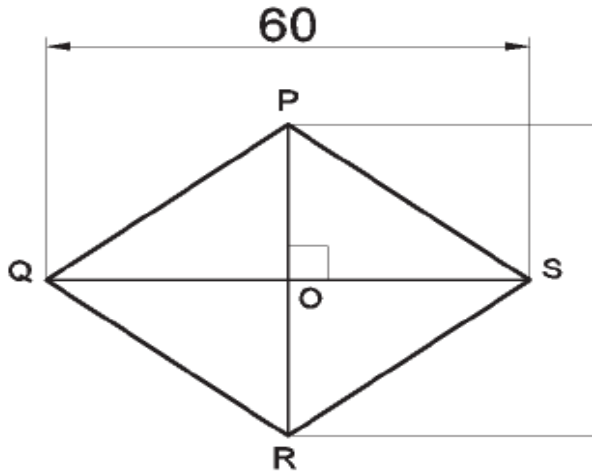
9	d) (ii) and (iv) only
10	b) Inscribing of circle
11	c) Reference line/XY line
12	d) Orthographic
13	b) Direction of viewing
14	c. Top view
15	a) 120 degree
16	a) Perpendicular to VP
17	b) Rectangle

18	b) Front view
19	a) First angle method of projection
20	b) Circle

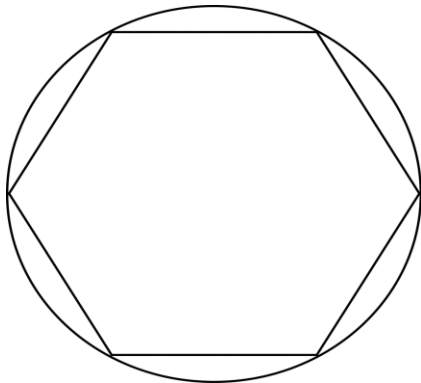
SECTION B

3 x 2 = 6

21. Construct a rhombus PQRS with diagonals 46 mm and QS = 60 mm.

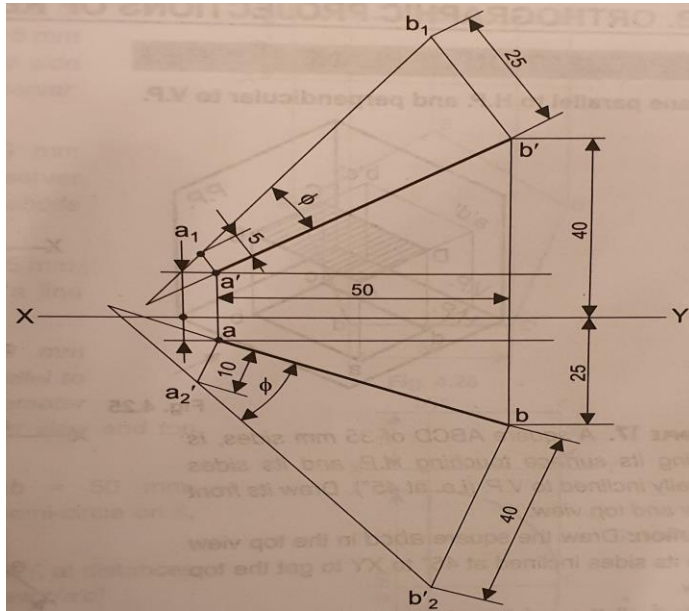


22. Circumscribe a circle about a regular pentagon ABCDE.



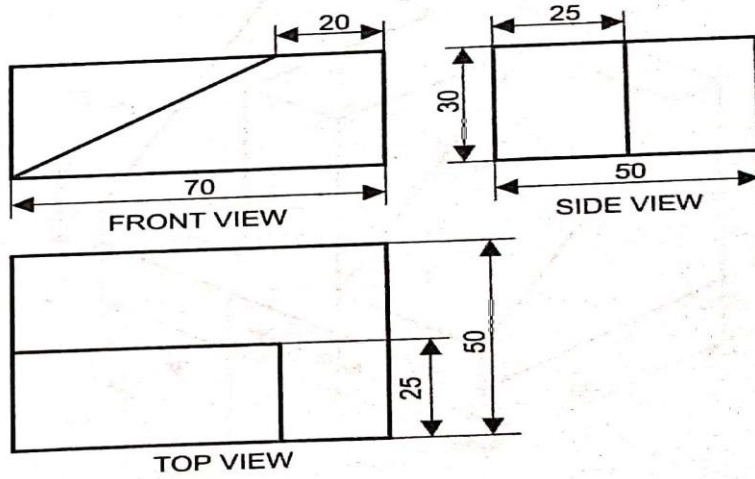
2 x 5 = 10

23. A line AB has its end A, 5mm from VP and 10 mm from HP, and B is 40mm from HP and 25mm from VP. The distance between its end projectors is 50mm. Draw its front view and top view. Also find its true length and true length of inclination with HP and VP using trapezoid method. Follow the first angle method of projection.



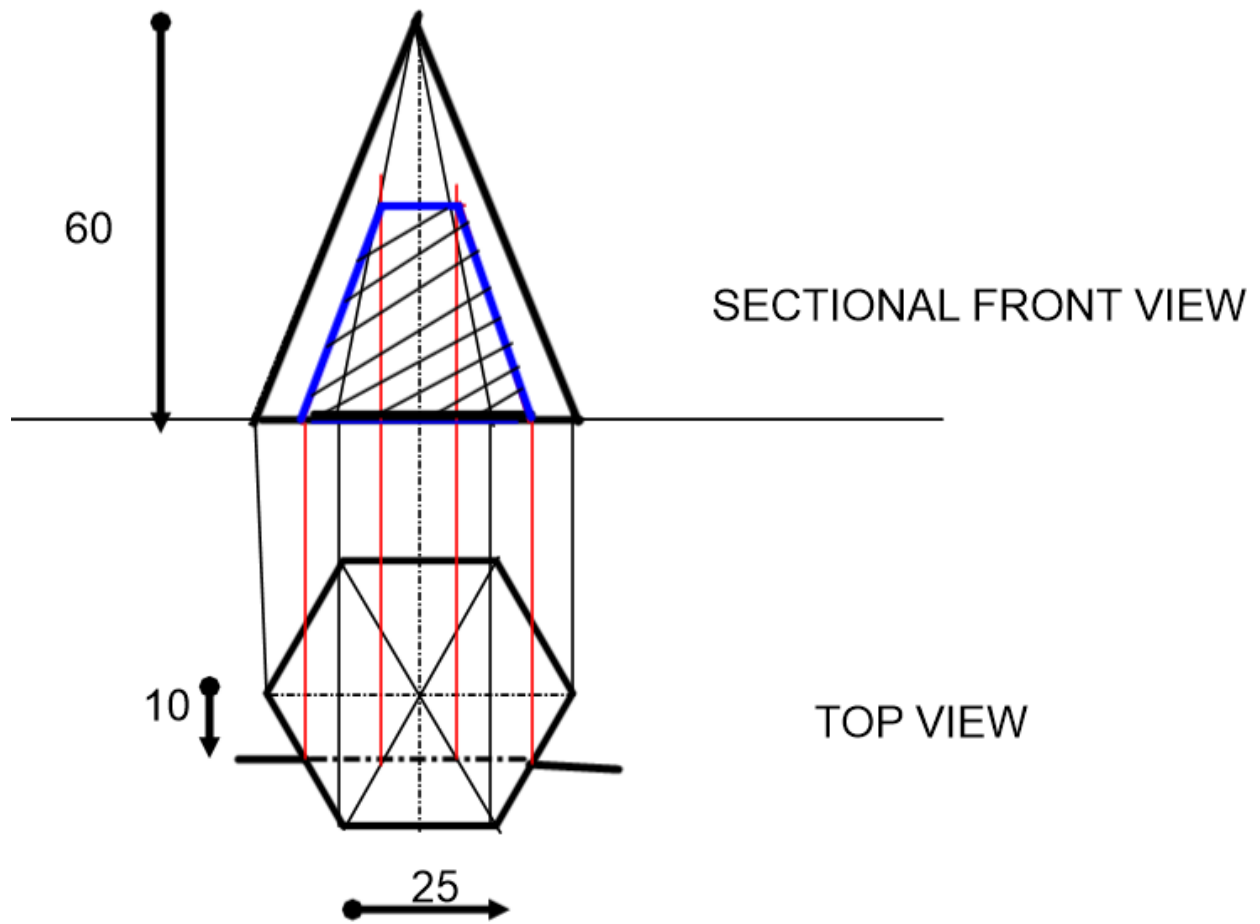
24. Project front view, side view and top view of the machine block, to scale 1:1

Solution:

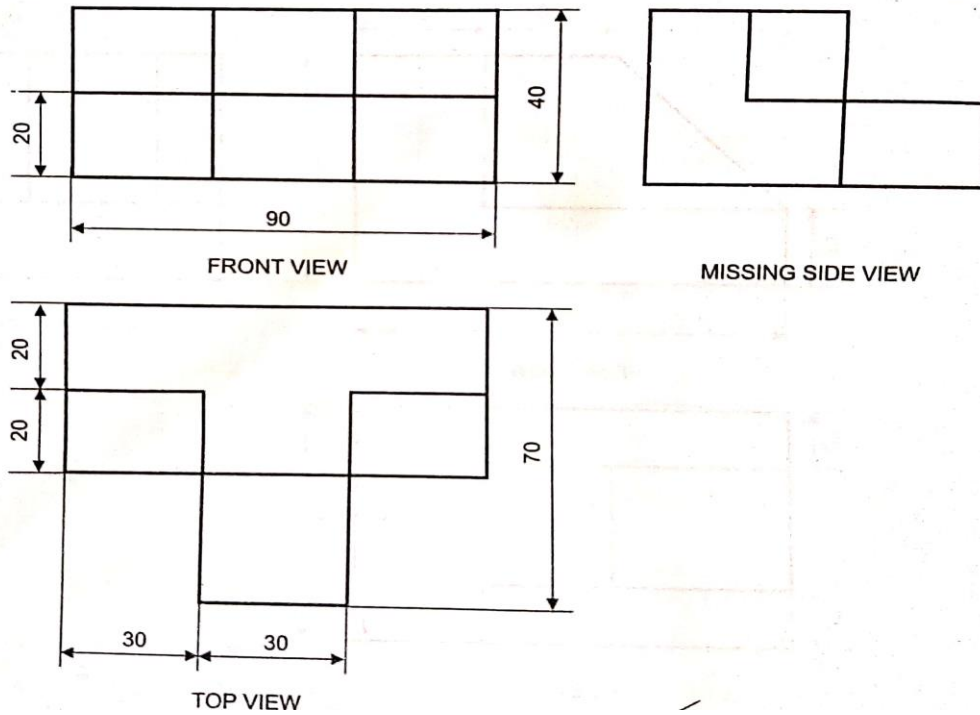


2 x 7 = 14

- 25.** A hexagonal pyramid of 25 mm base edges and 60 mm axis is resting on its base on HP. With two opposite base edges parallel to VP. It is sectioned by a vertical plane parallel to VP and 10 mm from its axis. Project its top view and sectional front view.

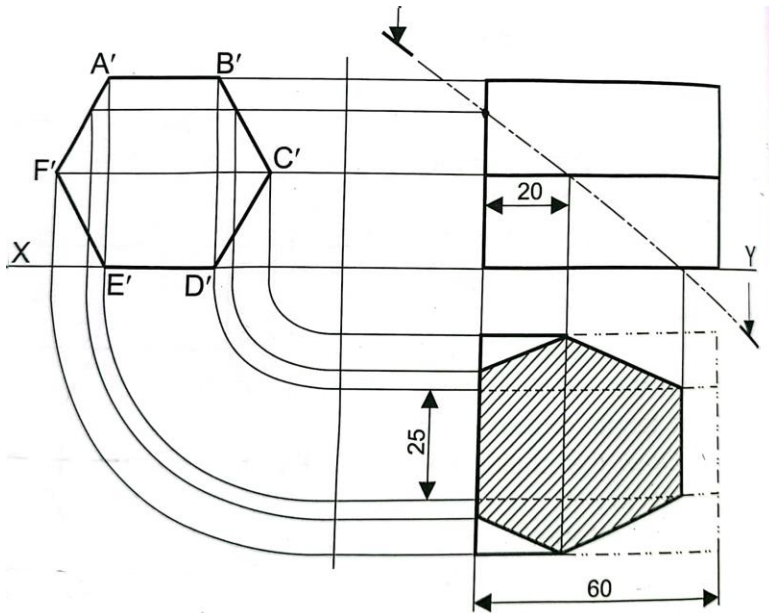


26. Project front view, side view and top view of the machine block, to scale 1:1



$$2 \times 10 = 20$$

27. A hexagonal prism of 25 mm base edges and 60 mm length is resting on one of its rectangular faces on the HP with its hexagonal ends at right angles to VP. It is cut by an oblique plane inclined to HP towards the right and intersecting the axis at a point 20 mm away from one of its ends. Project its Front view and Sectional top view.



28. A pentagonal prism having a 30 mm edge of its base and an axis of 60 mm length is resting on one of its rectangular faces with its axis parallel to both HP and VP. Draw the projections of the prism.

