Indian School Al Wadi Al Kabir
Final Examination (2025-2026)

Class: XI Subject: ENGINEERING GRAPHICS Max. marks:70
Date:24/02/2026 SET-1 Time: 3 hours

MARKING SCHEME

General Instructions:

(i) Attempt all the questions.
(ii) Use both sides of the drawing sheet, if necessary.
(iii) All dimensions are in millimeters.
(iv) Missing and mismatching dimensions, if any, may be suitably assumed.
(v) Follow the SP: 46 – 2003 revised codes. (with the first angle method of projection)

---

20 x 1 = 20

SECTION – A

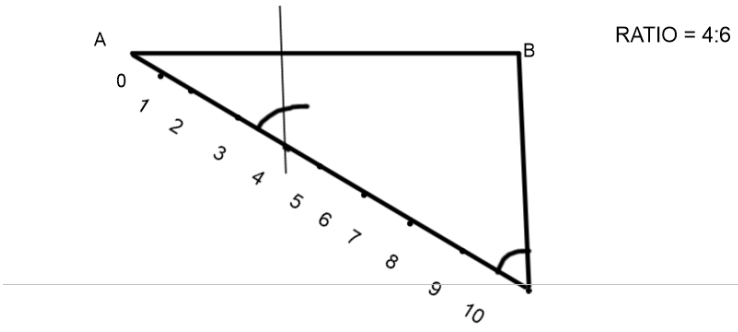
Q.NO	ANSWERS
1	(c) Chain thin
2	(a) Circle
3	(b) Octagon
4	(b) Triangular prism
5	(b) Elevation
6	(b) Horizontal section
7	(c) To the left of the front view
8	(b) 1-ii, 2-iii, 3-iv, 4-i
9	(b) (i) & (iii)

10	(c) Scalene
11	(c) Square pyramid
12	(a) Right side view, which represents the left side of the front view.
13	(b) Interior details
14	(a) 15°
15	(c) Parallelogram
16	(c) Concentric circles
17	(b) A rectangle
18	(c) 20 mm
19	(c) Dashed
20	(c) First angle method

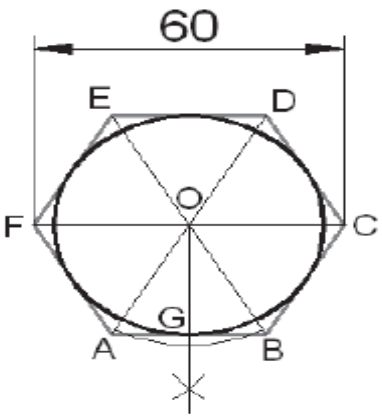
SECTION - B

3 × 2 = 6

21. Divide the line AB in the ratio 4:6.

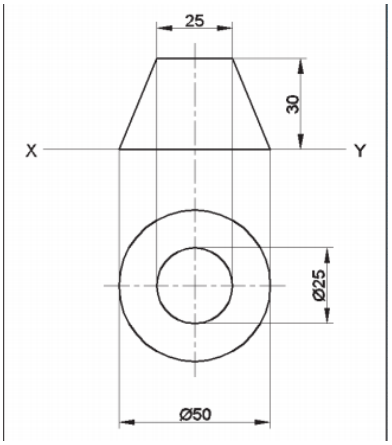


22. Inscribe a circle in a regular hexagon whose side is given as 40 mm.

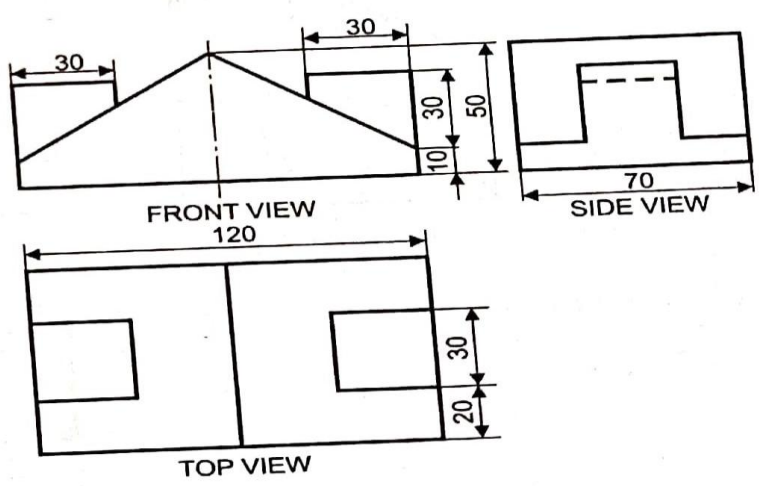


2 × 5 = 10

23. The frustum of a cone with base diameter = 50 mm, top face diameter = 25 mm, and vertical axis = 30 mm is resting on its base on H.P. Project its Front View and Top View.

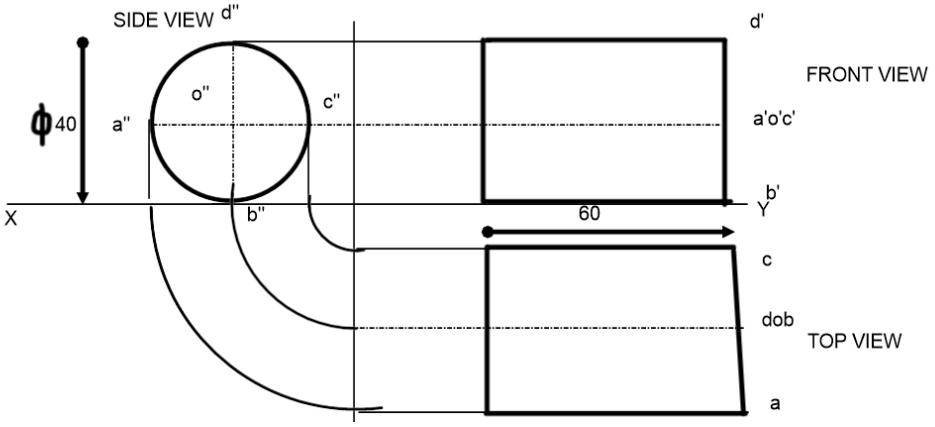


24.

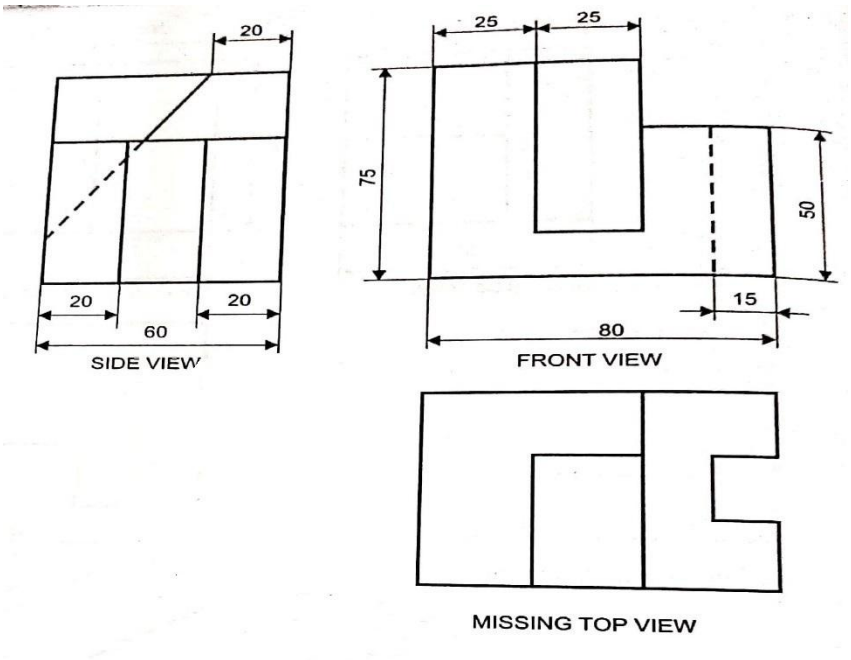


2 × 7 = 14

25. A cylinder of 40 mm diameter and a length of 60 mm is resting on its curved surface on HP, with its axis parallel to both HP and VP. Draw its front view and top view.

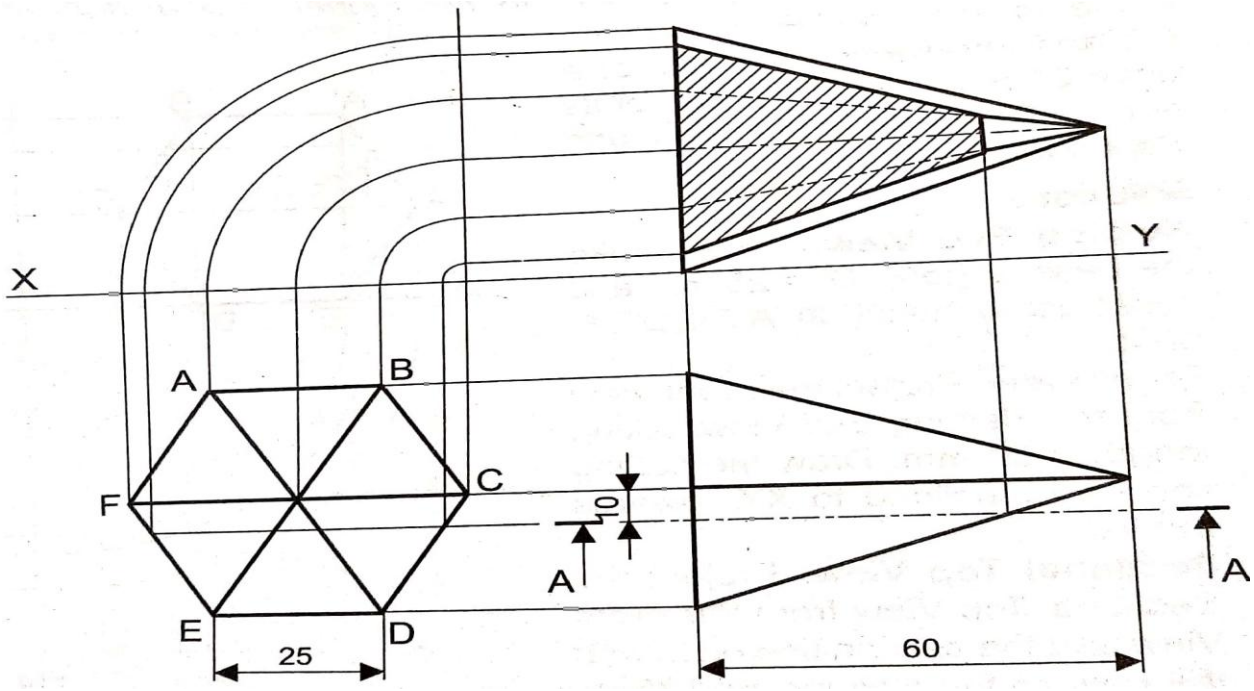


26.Project front view, side view and top view of the machine block, to scale 1:1

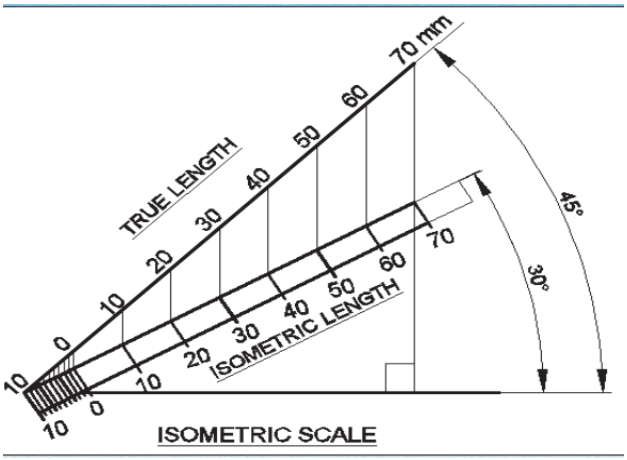


2 × 10 = 20

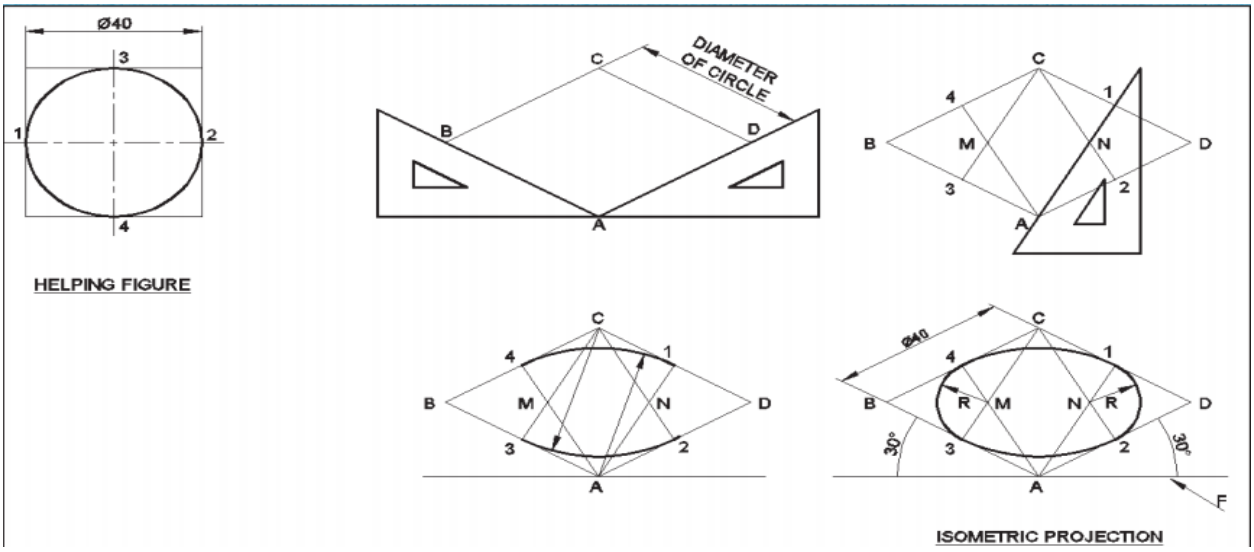
27. A hexagonal pyramid of 25 mm base edges and 60 mm long horizontal axis, is resting on one corner of its base, on HP with two opposite base edges parallel to VP. It is sectioned by a vertical plane parallel to VP and 10 mm from its axis. Project its top view and sectional front view.



28. (a) Construct an isometric scale of 70mm. (4)



28.(b)


Ø40
3
1
2
4
HELPING FIGURE
C
DIAMETER OF CIRCLE
B
D
A
C
4
1
B
M
N
D
3
2
A
C
4
1
B
M
N
D
3
2
A
Ø40
C
4
1
B
R
M
N
R
D
30°
3
2
30°
A
F
ISOMETRIC PROJECTION