



INDIAN SCHOOL AL WADI AL KABIR

CLASS: XII
DATE:20/09/26

ASSESSMENT -1 (2026-2027)

MAX MARKS:70
TIME: 3 HOURS

ENGINEERING GRAPHICS (046)

MARKING SCHEME

Set - 1

14 × 1 = 14

SECTION – A

Q.NO	ANSWERS
1	(c) Isometric Projection
2	(c) Cylinder
3	(b) Second Quadrant
4	(c) (ii) and (iv) only
5	(d) an angle of 30 degrees on the outer end face.
6	(a)

7	(a) 1-iii, 2-iv, 3-ii, 4-i
8	(a) any misalignment while fitting.
9	(c) (ii) and (iv) only
10	(c) 1-iii, 2-i, 3-iv, 4-ii
11	(b) (iii) and (iv) only
12	(c) (i) and (iv) only
13	(a) Bush
14	(a) by Sleeve and cotter joint

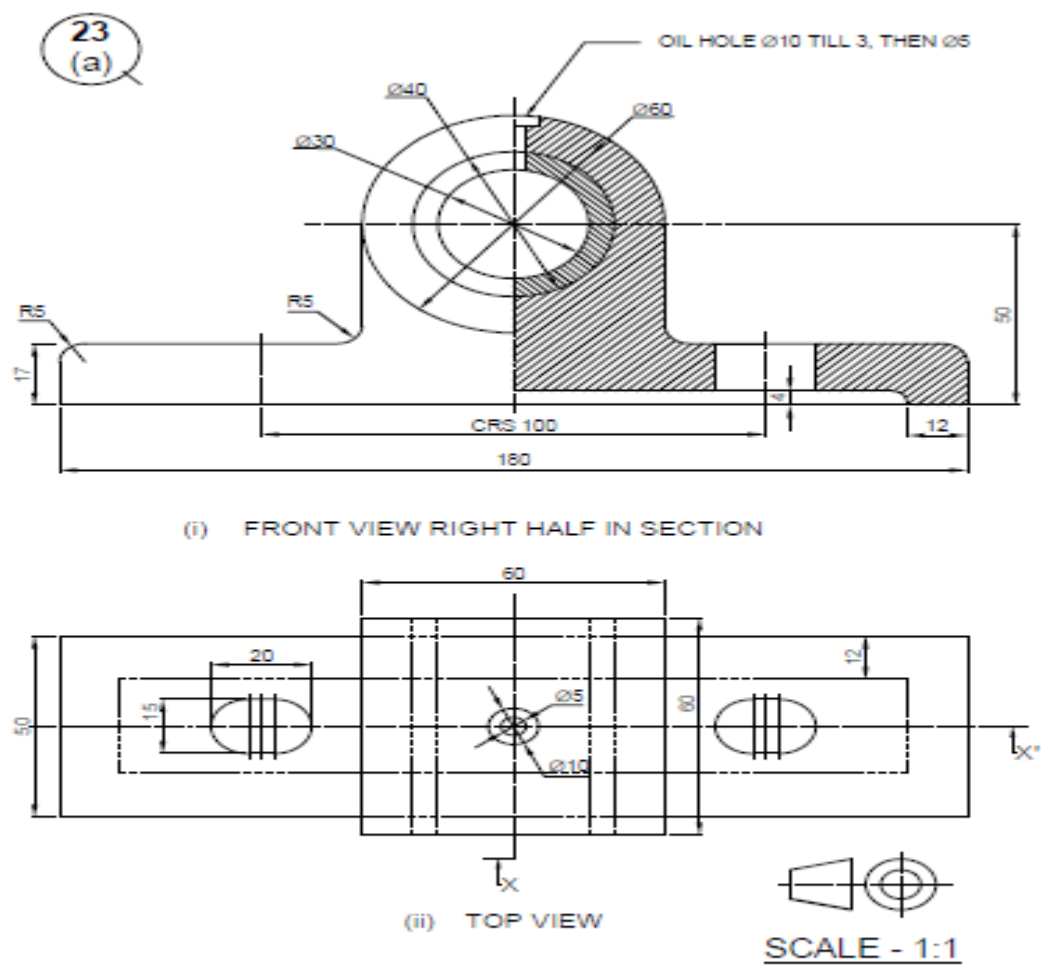
SECTION B

Q.NO	ANSWERS
15	(b) To obtain the reduced isometric lengths.
16	(b) The sides must be positioned with reference to the isometric axes
17	(c) Locate its end points using construction lines and join them
18	(c) 32.6 mm
19	(d) Distance between two corresponding points on the adjacent threads.
20	(b) If there is insufficient space to accommodate the head of the bolt
21	(d) Rivet
22	(b) 0.25 d

$$1 \times 27 = 27$$

23.(a) ASSEMBLY OF BUSH BEARING

- (i) Front view right half in section (13)
(ii) Top view (8)
(iii) Print the title and scale used. Draw projection symbol. Give 6 important dimensions. (6)



ASSEMBLY OF BUSH BEARING

OR

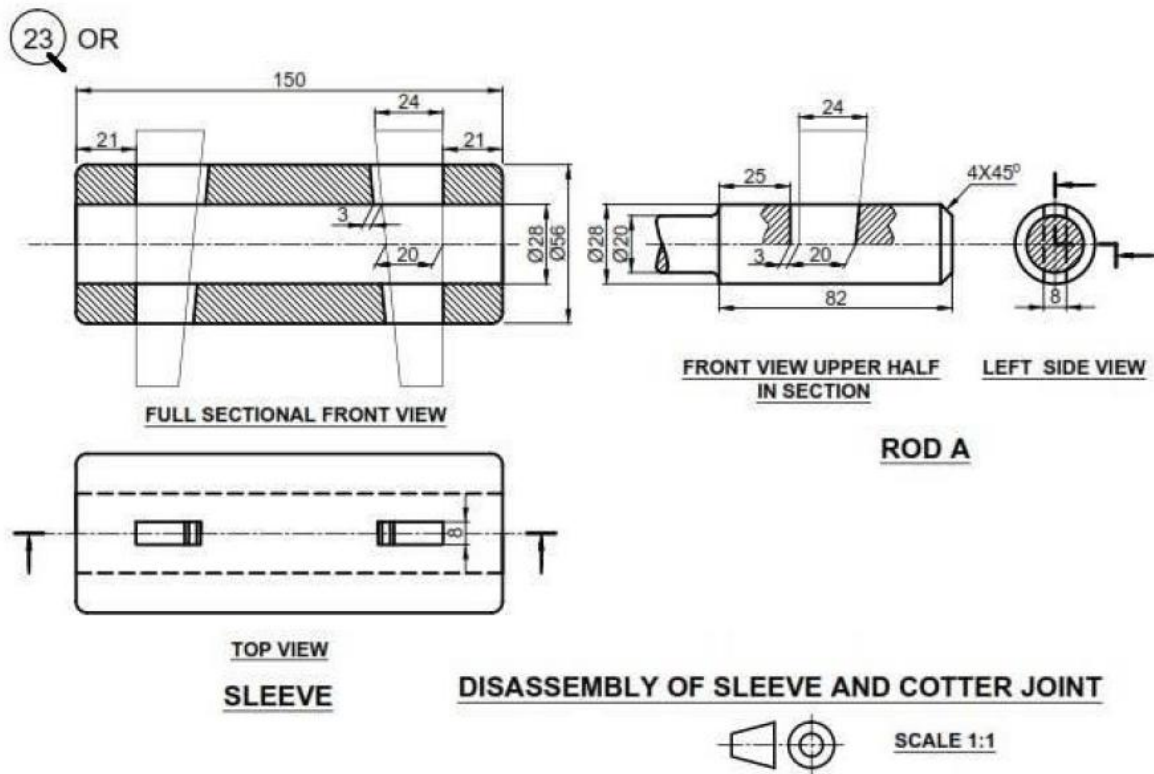
23.(b) DIS-ASSEMBLY OF SLEEVE AND COTTER JOINT

SLEEVE

- | | | |
|------|---------------------------|-----|
| (i) | Full sectional front view | (8) |
| (ii) | Top view | (6) |

ROD A

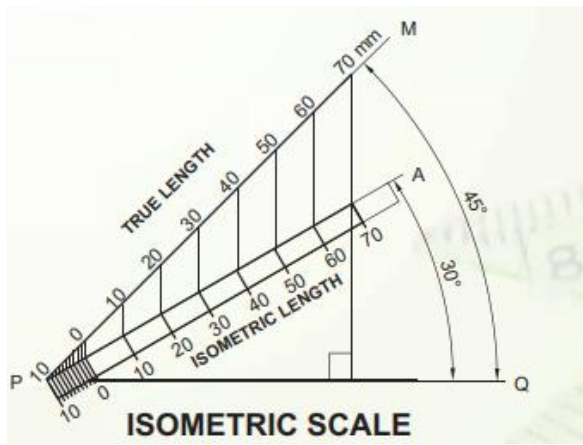
- | | | |
|---|----------------------------------|-----|
| (i) | Front view upper half in section | (4) |
| (ii) | Left side view | (3) |
| (iii) Print the titles of both and scale used. Draw the projection symbol. Give 6 important dimensions. | | (6) |



SECTION C

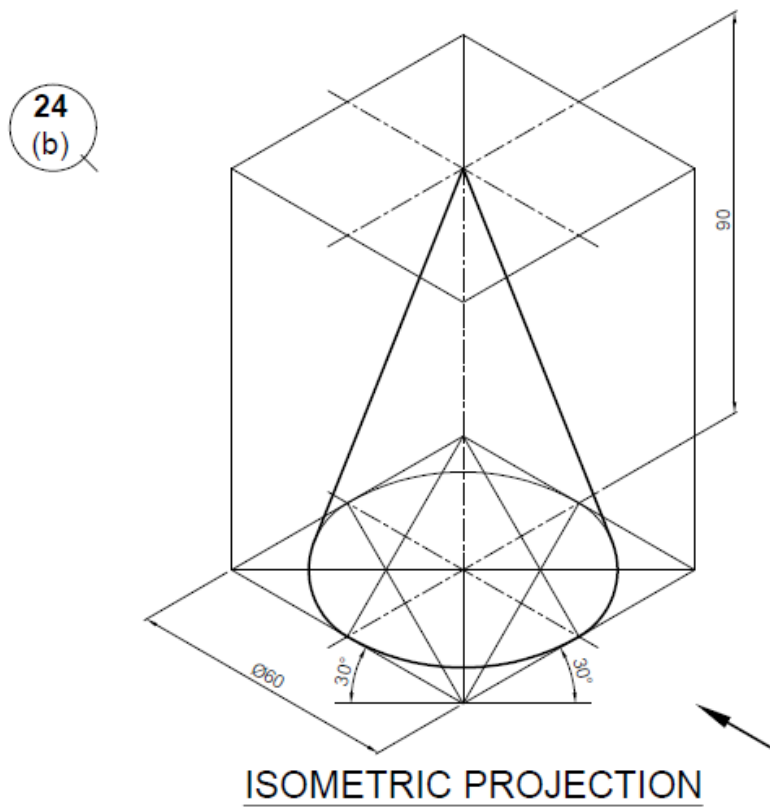
$$1 \times 4 = 4$$

24.(a) Construct an isometric scale.

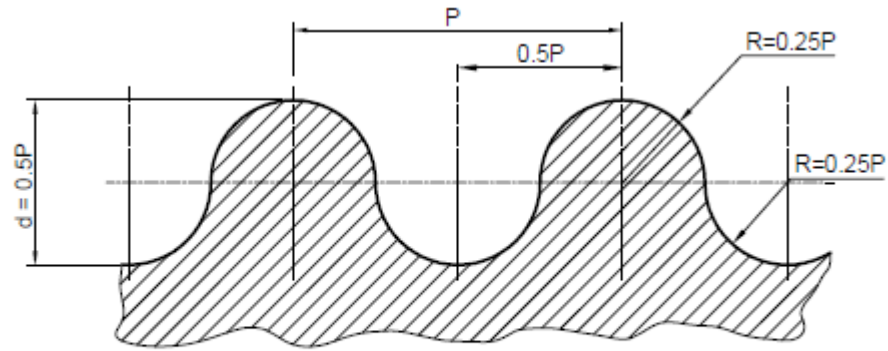


$$1 \times 9 = 9$$

24 (b) Draw the isometric projection of an upright cone (diameter 60 mm, axis 90 mm). It is placed on H.P. on its base. Indicate the direction of viewing. Give all the dimensions.



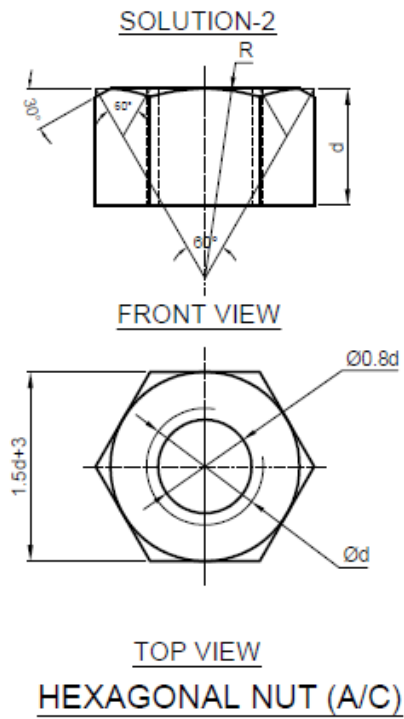
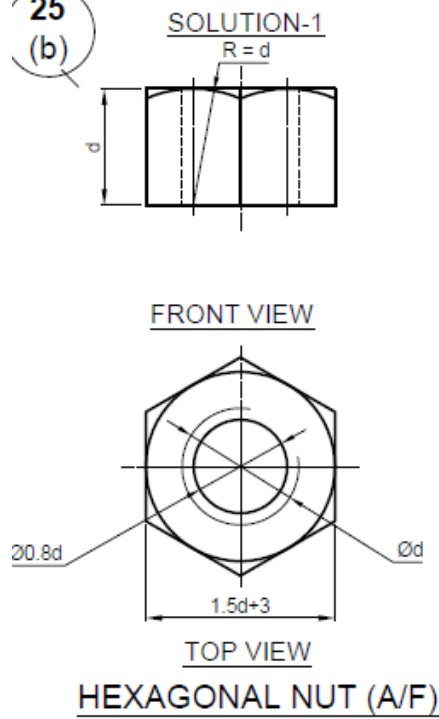
25
(a)



P	d=0.5P	R=0.25P
50	25	12.5

OR

25
(b)



d	0.8d	1.5d+3
25	20	40.5