



INDIAN SCHOOL AL WADI AL KABIR

CLASS: XII
DATE: 29/09/24

ASSESSMENT 1 (2024-2025)
ENGINEERING GRAPHICS (046)

MAX MARKS: 70
TIME: 3 HOURS

MARKING SCHEME

Set - 1

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 first angle method of projection)
- (vi) In question 23, hidden edges or lines are to be shown in views without section
- (vii) In question 24, no hidden edges or lines required.

14 x 1 = 14

SECTION – A

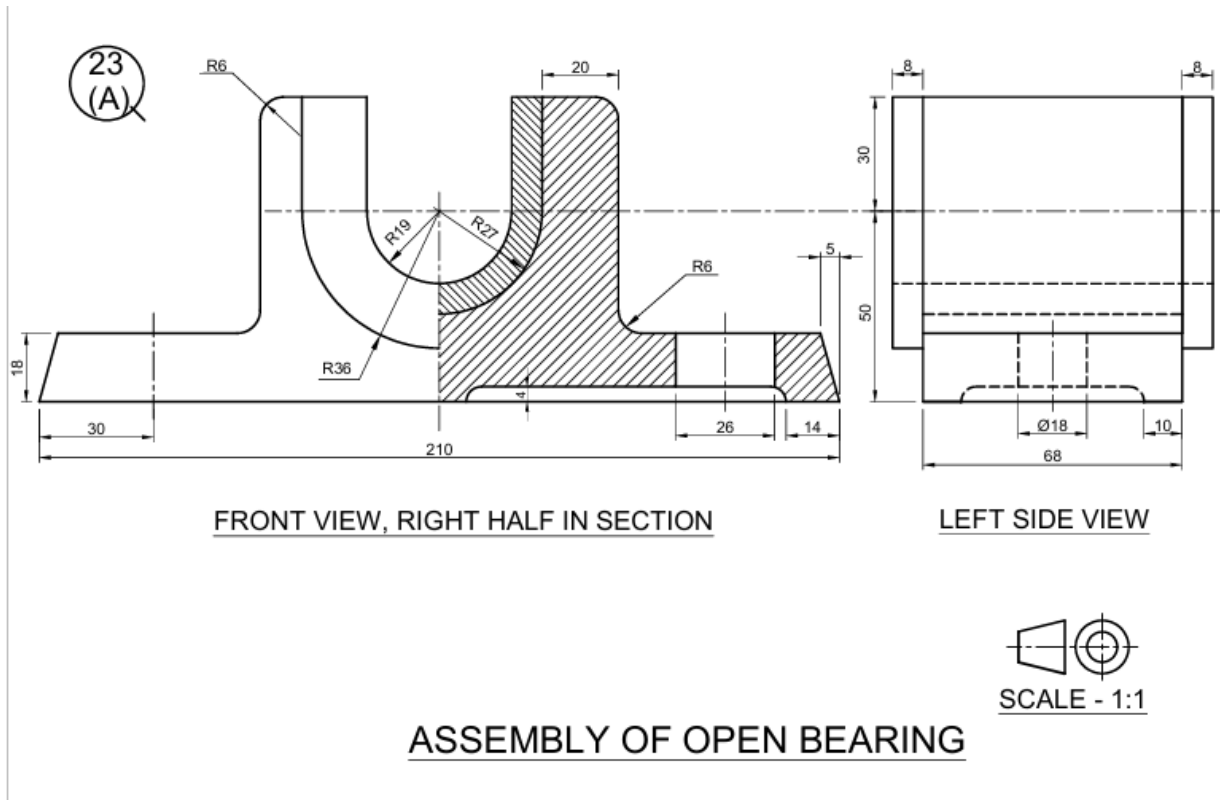
Q.NO	ANSWERS
1	(c) Isometric
2	(a) Below HP and behind VP
3	(d) Sphere

4	(b) Assembly drawing
5	(c) (ii) and (iv) only
6	c) (i) and (iv) only
7	(a)
8	(b) 1-(i), 2-(iii), 3-(iv), 4-(ii)
9	(c) (i) and (iv) only
10	c) 1-(ii), 2-(i),3-(iv),4-(iii)
11	(b) bearing
12	(d) 60°
13	(b) Flank
14	Journal

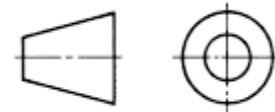
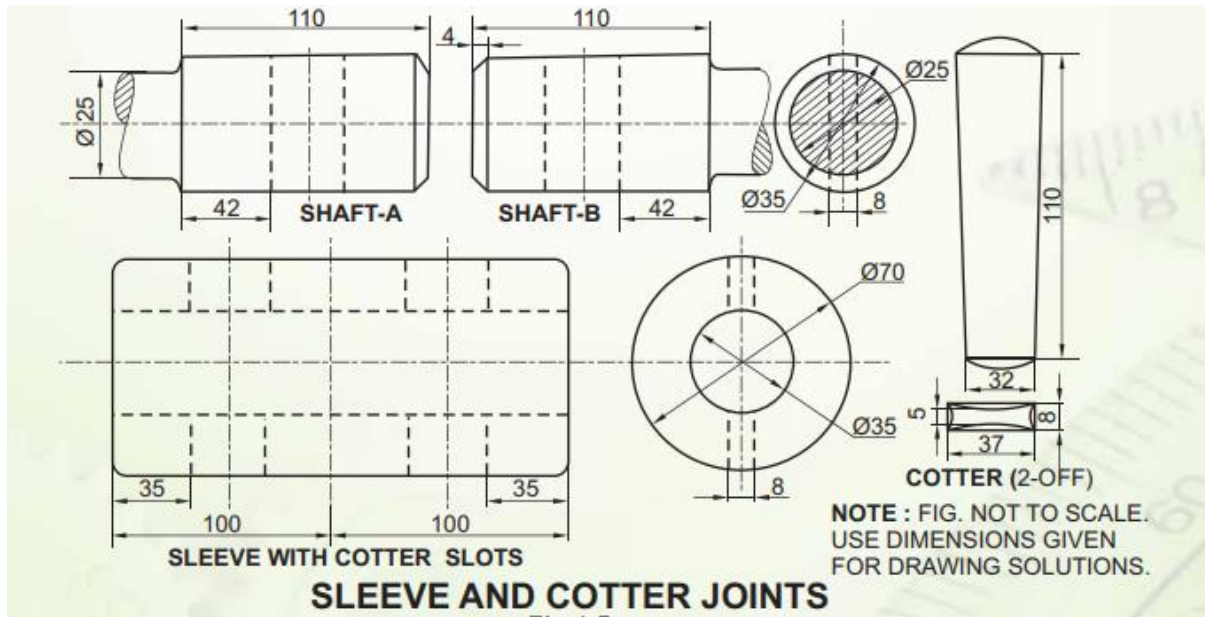
SECTION B

Q.NO	ANSWERS
15	(b) Isometric scale
16	(a) Equally foreshortened
17	(a) dimensional projection
18	(d) Axonometric projection
19	(c) Stud
20	(b) Rivet heads
21	(b) 36
22	(d) Snap head rivet

1 X 27 = 27



OR

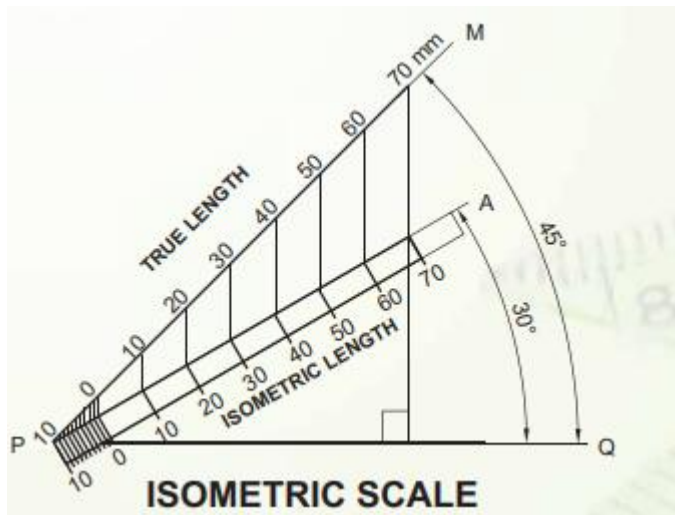


SCALE 1:1

SECTION C

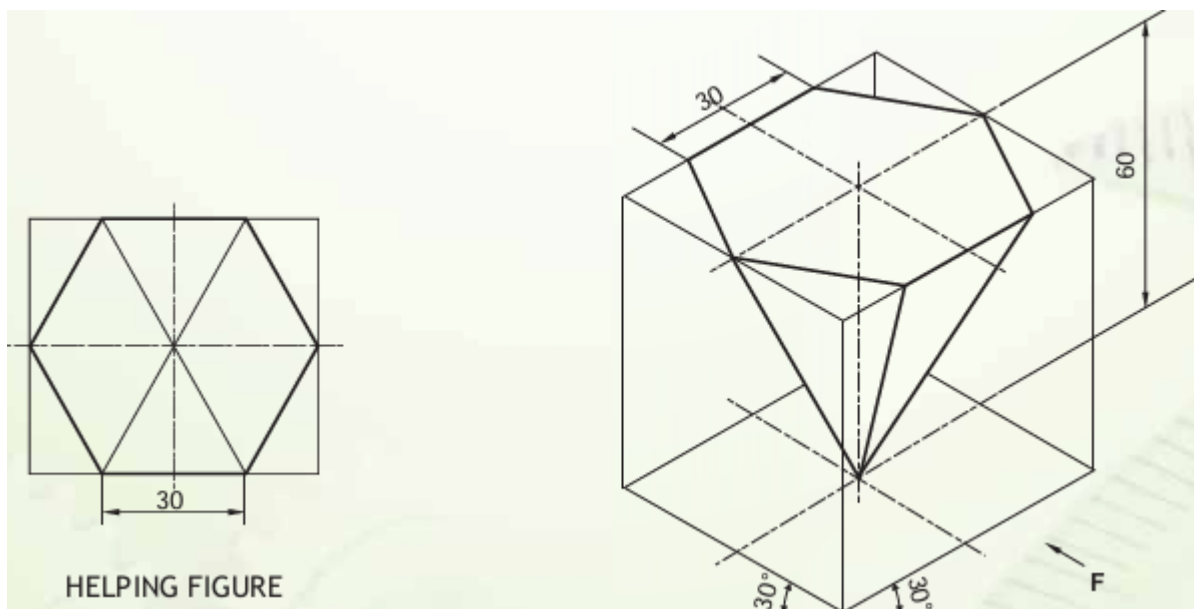
1 x 4 = 4

24.(a) Construct an isometric scale of 80 mm.



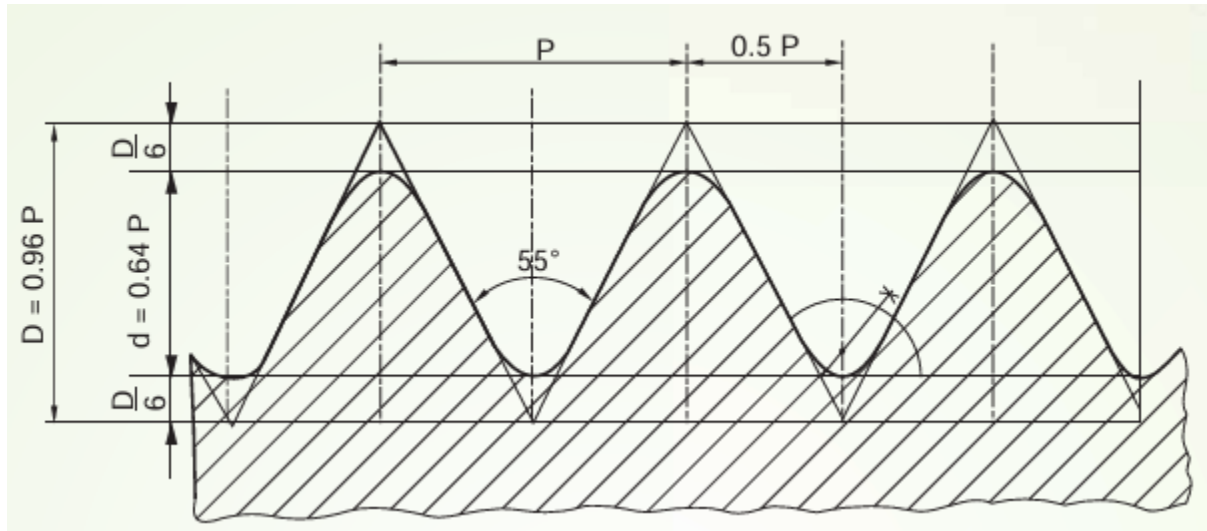
1x 9 = 9

24. (b) Draw the isometric projection of an inverted hexagonal pyramid of base edge 30 mm and height of 60 mm keeping two of its base side parallel to the V.P. Indicate the direction of viewing and give all the dimensions.



1 x 8 = 8

25.(a) Draw to scale 1:1, the standard profile of BSW thread with enlarged pitch as 50 mm. Give standard dimensions.



P	$D=0.96P$	$d = 0.64P$	$D/6$
50	48	32	8

OR

25.(b) Draw to scale 1 : 1, the front view and side view of a hexagonal headed bolt (diameter 30 mm). Keep its axis horizontal, take the length of the bolt as 120mm. Give standard dimensions.

