



INDIAN SCHOOL AL WADI AL KABIR

Class: XII	Department: SCIENCE	Date: 29/11/2022
MARKS: 70	REHEARSAL 1 <u>ENGINEERING GRAPHICS (046)</u> <u>MARKING SCHEME</u>	DURATION :3 hrs.

GENERAL INSTRUCTIONS:

- (i) Attempt all the questions.
- (ii) Use both sides of the drawing sheet, if necessary.
- (iii) All dimensions are in millimetres.
- (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 21, hidden edges or lines required.
- (vii) In question 23, hidden edges or lines are to be shown in views without section.

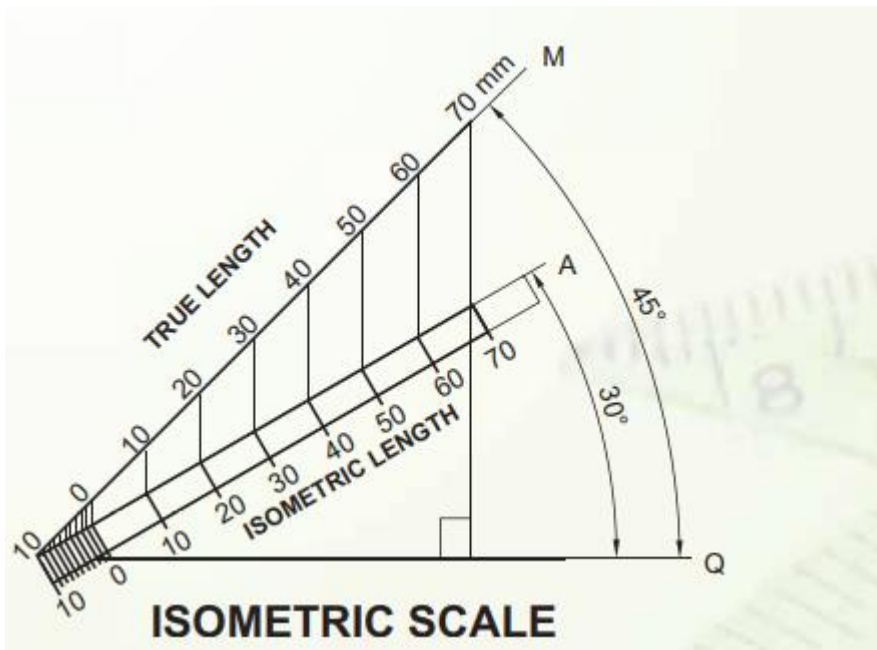
SECTION – A

1	2	3	4	5
c	b	a	a	c
6	7	8	9	10
c	b	d	c	b
11	12	13	14	15
c	b	b	b	c
16	17	18	19	20
a	b	d	a	b

SECTION – B

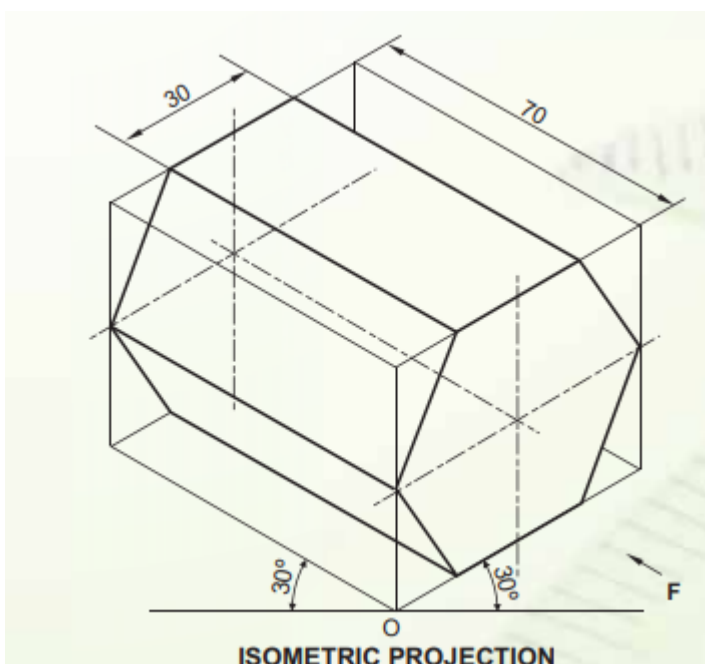
21. (a) Construct an isometric scale.

5

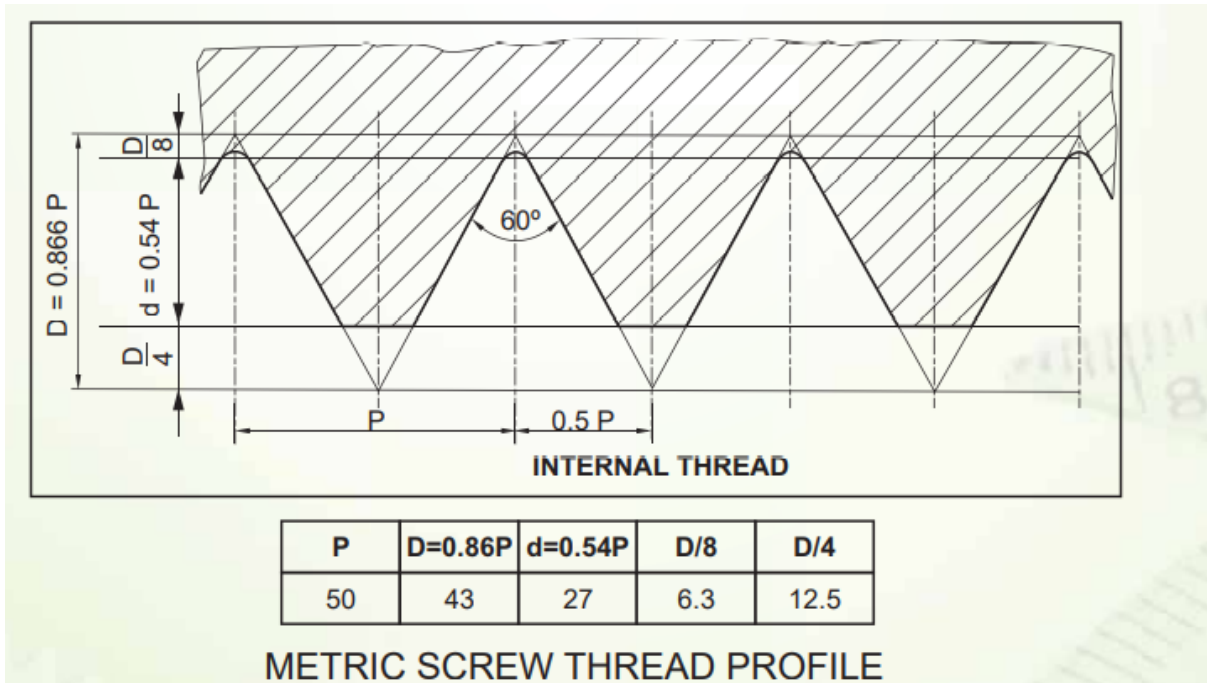


(b) A hexagonal prism of base side 30 mm and height of 70 mm resting on its face on H.P. with two of its bases are parallel to V.P. Draw its isometric projection, indicate the direction of viewing and give all the dimensions.

10

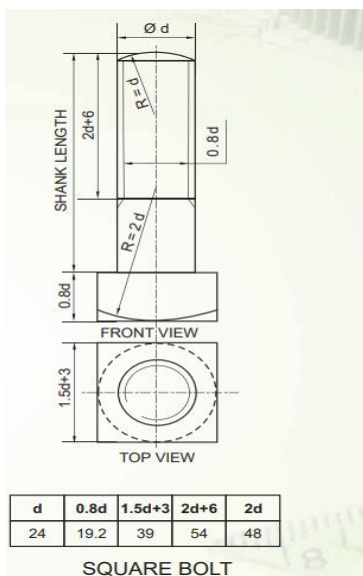


22. Draw to scale 1:1, the standard profile of the Metric thread profile (Internal) with the pitch = 50mm. Give standard dimensions. 8



OR

Draw to scale 1:1 the Front view and Plan of a square head bolt when its axis is perpendicular to H.P. Take the diameter of the bolt as 24mm, and length as 110 mm. 8



23. Figure given below shows the parts of a Sleeve and Cotter Joint. Assemble the parts correctly and then draw the following views to a scale 1: 1

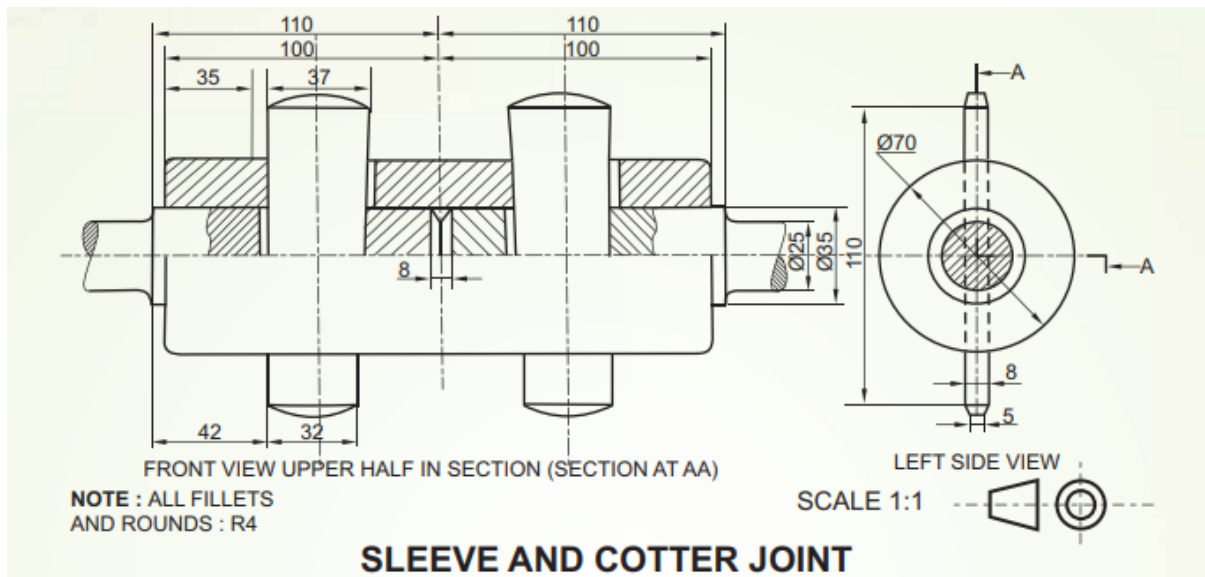
(a) Front view, upper half in section.

13

(b) Side view, viewing from the left.

8

(c) Print title and scale used. Draw the projection symbol. Give '8' important dimensions. 6



OR

The figure shows the assembly of the parts of a flanged pipe joint. Disassemble the parts and draw the following views of the components to scale 1:1, keeping them in the same position with respect to HP and VP.

(i) Flange B

a) Front view, upper half in section

b) Right hand side view

13

(ii) Gasket

a) Full sectional front view

b) Left hand side view

8

iii) Print the titles of both and scale used. Draw the projection symbol and give 6 important dimensions.

6

