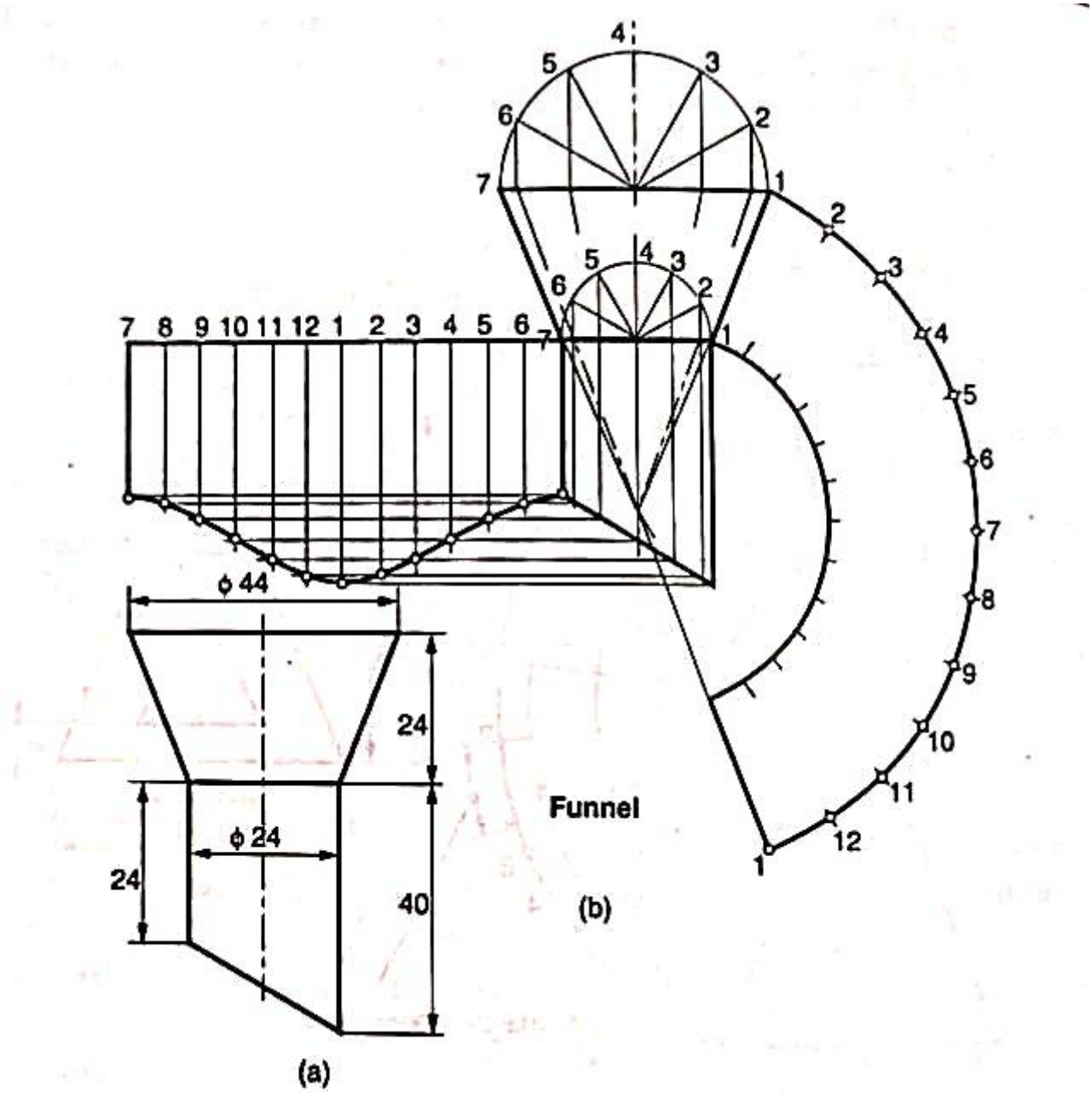
EXPERIMENT NO. - 01

AIM – To draw development of the lateral surface of funnel with given dimensions.

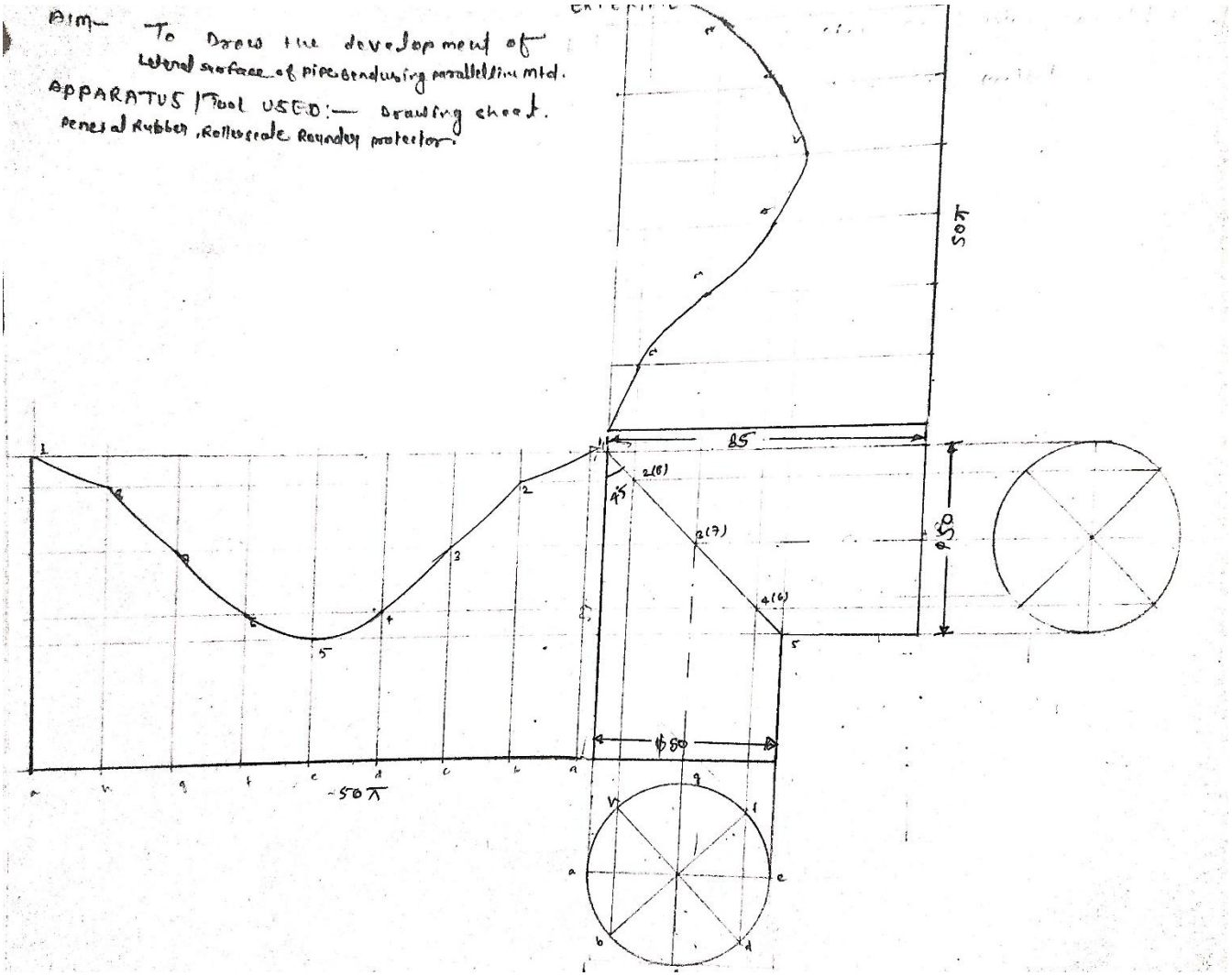
DRAWING INSTRUMENT – Roller scale, protector, divider, rounder, pencil (H, 3H, HB), eraser, drawing sheet, drawing board, clamp etc.



EXPERIMENT NO. - 02

AIM – To draw development of the lateral surface of pipe bend with given dimensions.

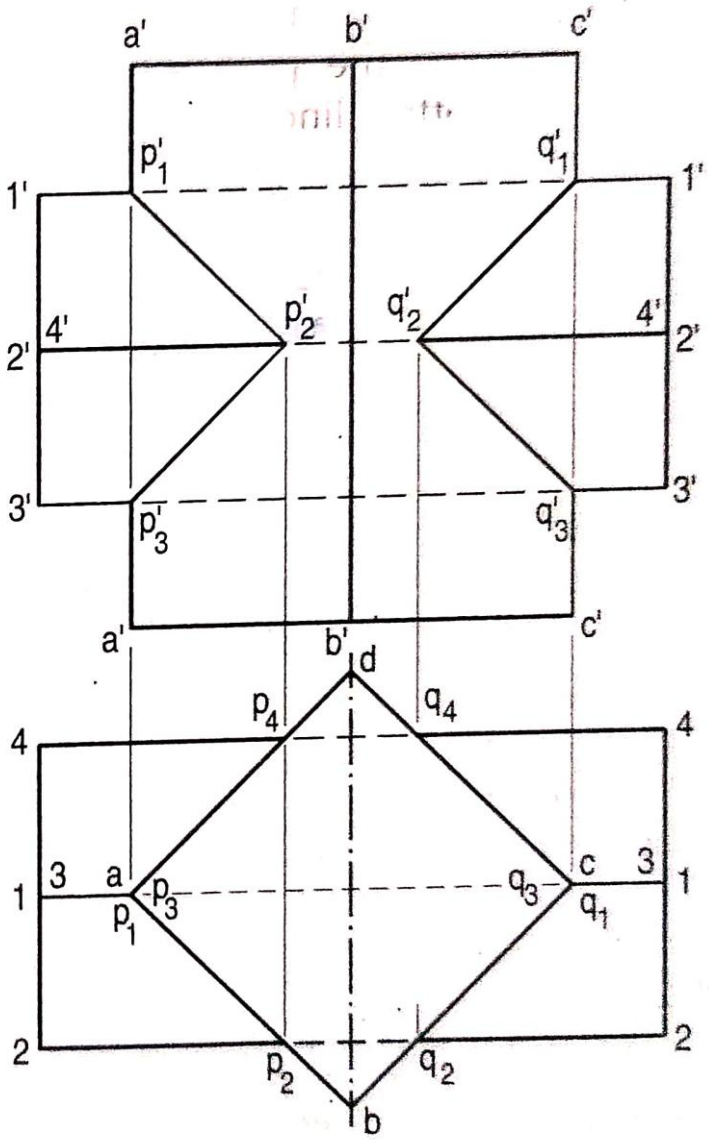
DRAWING INSTRUMENT – Roller scale, protector, divider, rounder, pencil (H, 3H, HB), eraser, drawing sheet, drawing board, clamp etc.



EXPERIMENT NO. - 03

AIM – To draw curve of intersection in case of square prism with square prism of given dimensions.

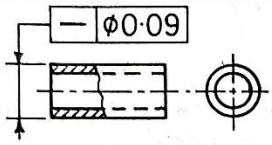
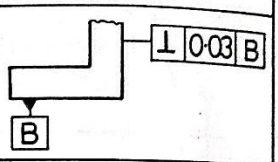
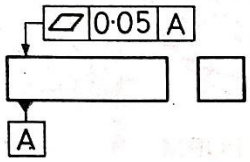
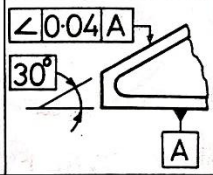
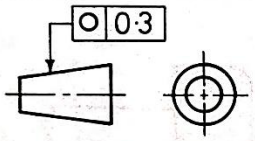
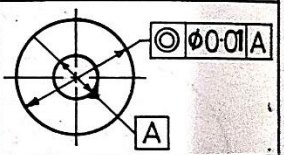
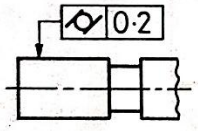
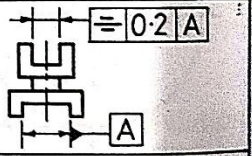
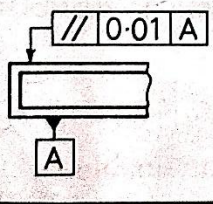
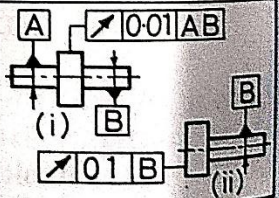
DRAWING INSTRUMENT – Roller scale, protector, divider, rounder, pencil (H, 3H, HB), eraser, drawing sheet, drawing board, clamp etc.



EXPERIMENT NO. - 04

AIM – Draw symbols for representing different geometrical tolerances.

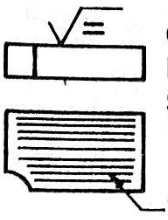
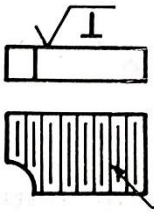
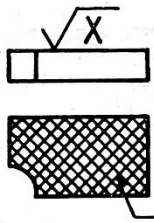
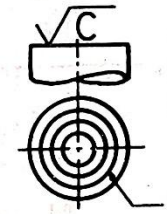
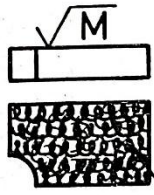
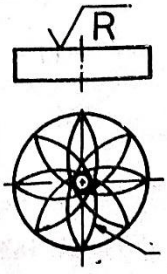
DRAWING INSTRUMENT – Roller scale, protector, divider, rounder, pencil (H, 3H, HB), eraser, drawing sheet, drawing board, clamp etc.

CHARACTERISTICS TO BE TOLERANCED	SYMBOL	ILLUSTRATION	CHARACTERISTICS TO BE TOLERANCED	SYMBOL	ILLUSTRATION
STRAIGHTNESS	—		PERPENDICULARITY	⊥	
FLATNESS	▱		ANGULARITY	∠	
CIRCULARITY	○		CONCENTRICITY AND COAXIALITY	◎	
CYLINDRICITY	⌭		SYMMETRY	⌯	
PARALLELISM	//		RUN-OUT (i) RADIAL RUNOUT (ii) AXIAL RUNOUT	↗	

EXPERIMENT NO. - 05

AIM – Draw symbols for representing different surface finish (Lay symbol).

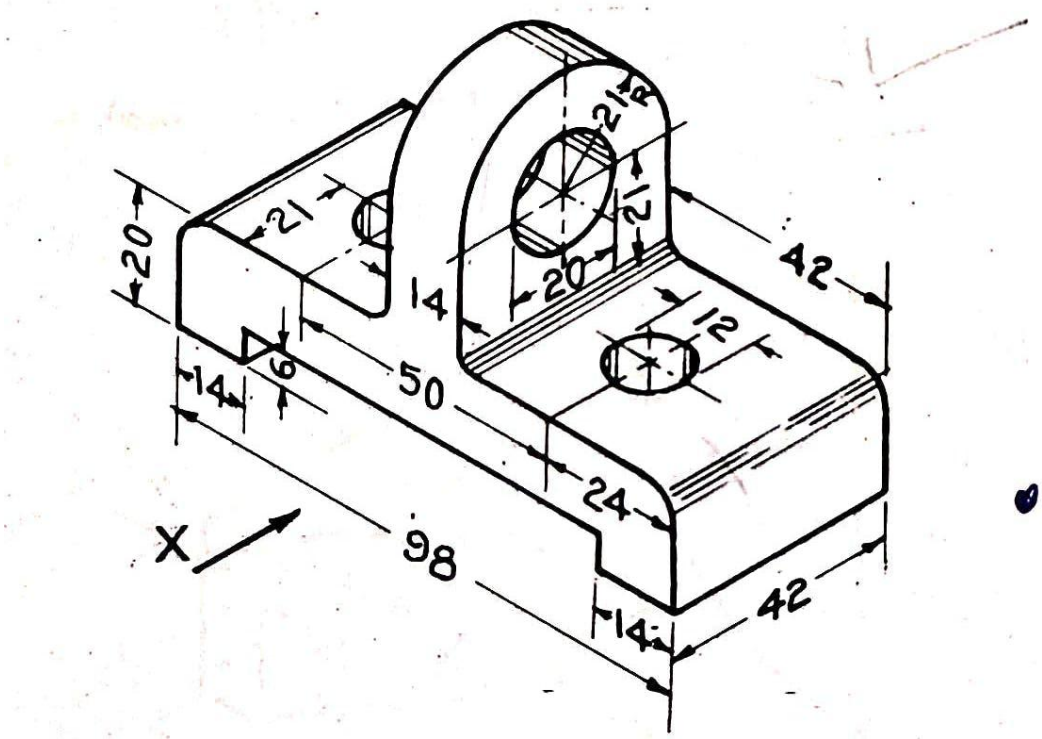
DRAWING INSTRUMENT – Roller scale, protector, divider, rounder, pencil (H, 3H, HB), eraser, drawing sheet, drawing board, clamp etc.

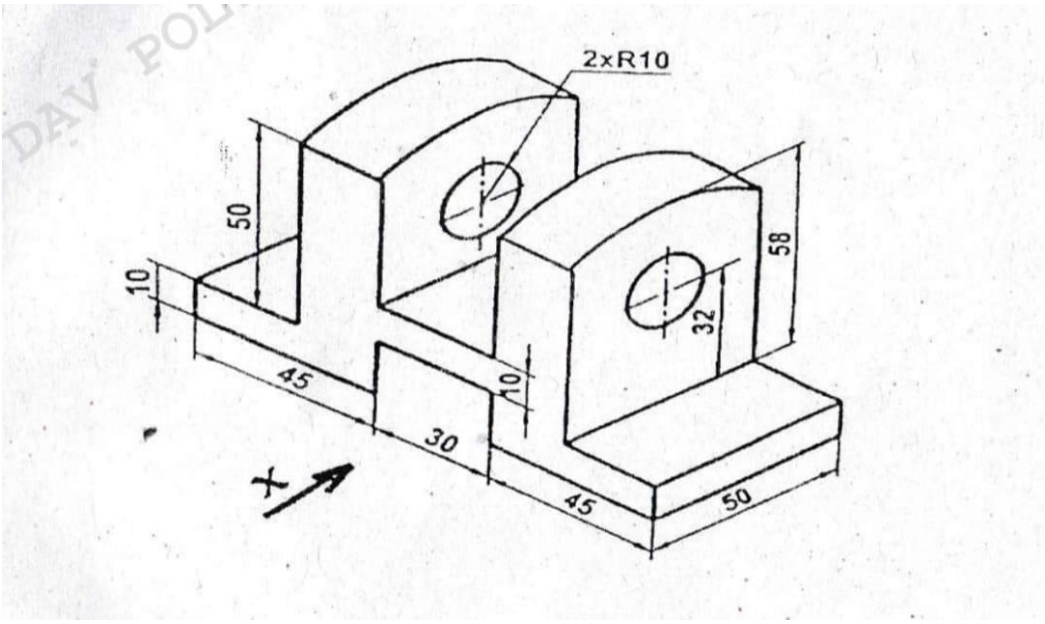
SYMBOL	DESCRIPTION	ILLUSTRATION
=	LAY PARALLEL TO THE LINE REPRESENTING SURFACE TO WHICH THE SYMBOL IS SHOWN.	
⊥	LAY PERPENDICULAR TO THE LINE REPRESENTING SURFACE TO WHICH THE SYMBOL IS SHOWN.	
X	LAY ANGULAR IN BOTH DIRECTIONS TO LINE REPRESENTING THE SURFACE TO WHICH THE SYMBOL IS SHOWN.	
C	CIRCULAR RELATIVE TO THE CENTRE OF THE SURFACE TO WHICH THE SYMBOL IS SHOWN.	
M	MULTI-DIRECTIONAL.	
R	APPROXIMATELY RADIAL RELATIVE TO THE CENTRE OF SURFACE TO WHICH THE SYMBOL IS SHOWN.	

EXPERIMENT NO. - 06

AIM – Draw orthographic sectional view of simple machine elements.

DRAWING INSTRUMENT – Roller scale, protector, divider, rounder, pencil (H, 3H, HB), eraser, drawing sheet, drawing board, clamp etc.

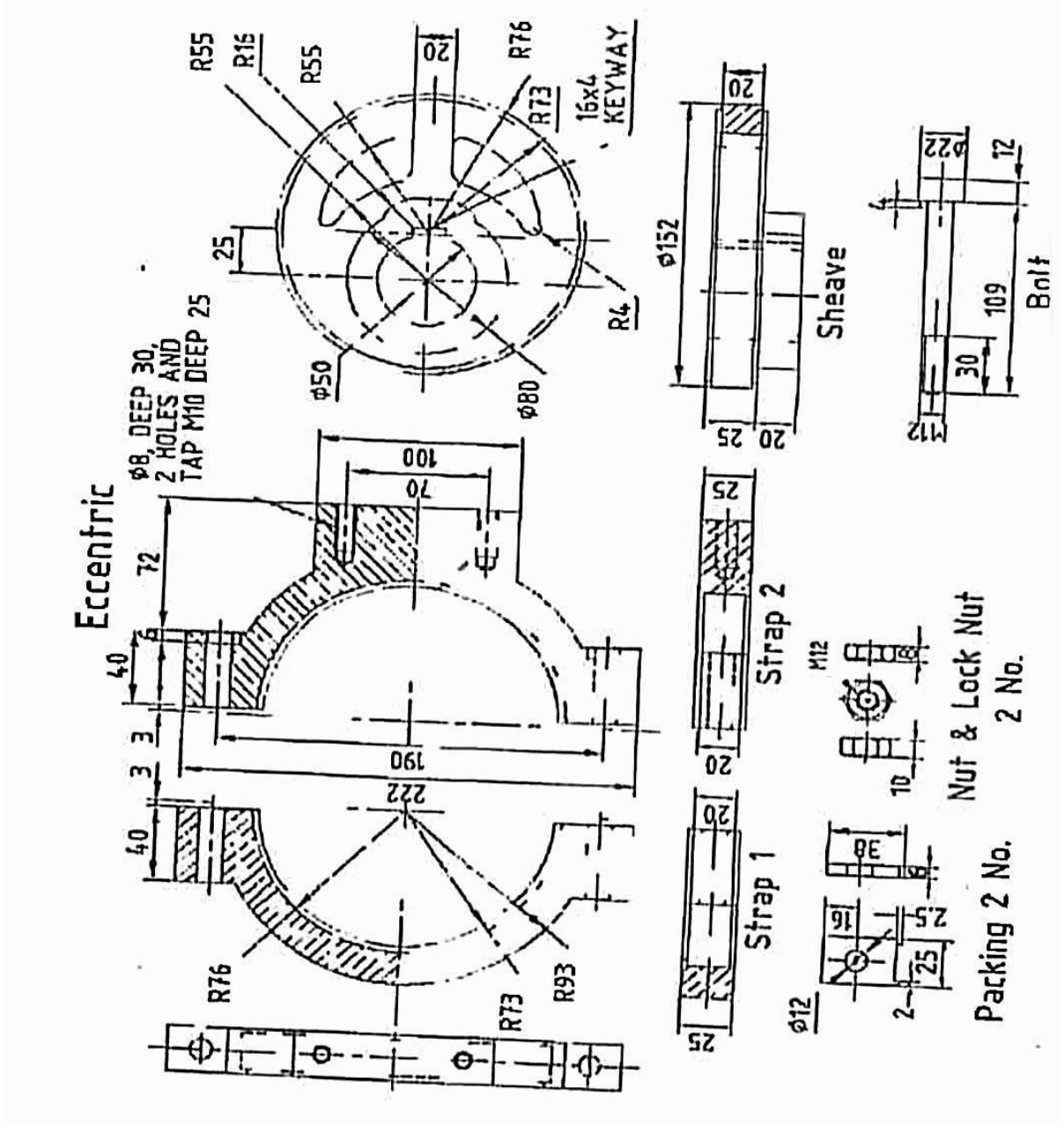




EXPERIMENT NO. - 07

AIM – Assemble all the parts of eccentric and draw half sectional front view of the given detail drawing.

DRAWING INSTRUMENT – Roller scale, protector, divider, rounder, pencil (H, 3H, HB), eraser, drawing sheet, drawing board, clamp etc.



EXPERIMENT NO. - 08

AIM – Draw symbols for representing different machine elements and material.

DRAWING INSTRUMENT – Roller scale, protector, divider, rounder, pencil (H, 3H, HB), eraser, drawing sheet, drawing board, scale, clamp etc.

Machine Parts –

1) Internal Thread
2) Leaf spring
3) Diamond knurling
4) Splined shaft
5) Bearings

Materials –

1) Mild Steel
2) Brass
3) Bronze
4) Wood
5) Glass
6) Rubber