

QUESTION 4: MECHANICAL ASSEMBLY

GIVEN:

The exploded isometric drawing of the parts of a pulley clamp, showing the position of each part relative to all the others. Orthographic views of each of the parts of the pulley clamp. The centre lines for the front view and left view of the pulley clamp on page 9.6.

INSTRUCTIONS:

Answer this question on page 9.6.

Draw, to scale 1:1 and in third-angle orthographic projection, the following views of the assembled parts of the pulley clamp.

A sectional front view, on cutting plane S - S.

- The front view is seen from the direction of the arrow shown on the exploded isometric drawing.
- Show three sides of the bolt in the sectional front view.
- Show a part sectioned area on the shaft to indicate the position of the key.
- No hidden detail is required

The left view

- Show all hidden detail on this view.
- Show the cutting plane S - S on the left view.

A top view

- No hidden detail is required on this view.

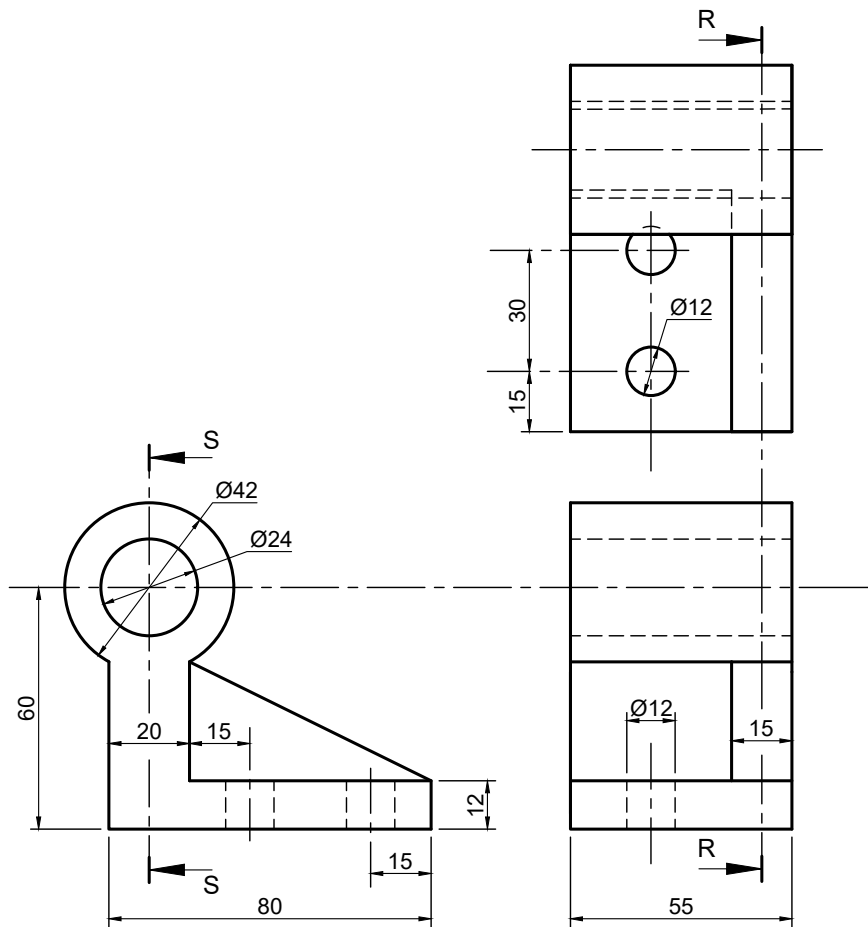
NOTE:

All drawings must comply with the guidelines contained in the SANS 10111.

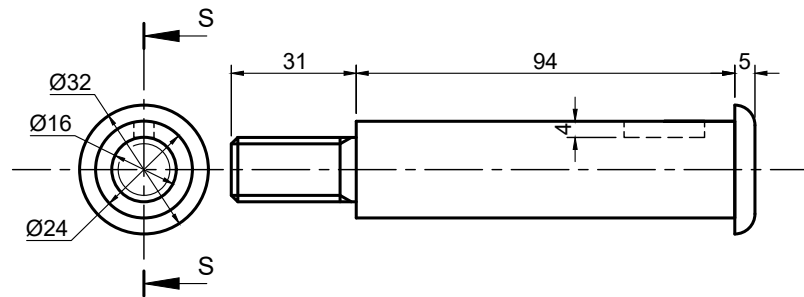
Add the following to the drawing:

- The projection system symbol for the system of projection used.
- Between 5 mm guidelines neatly supply the drawing with a title and scale
PULLEY CLAMP
SCALE 1:1

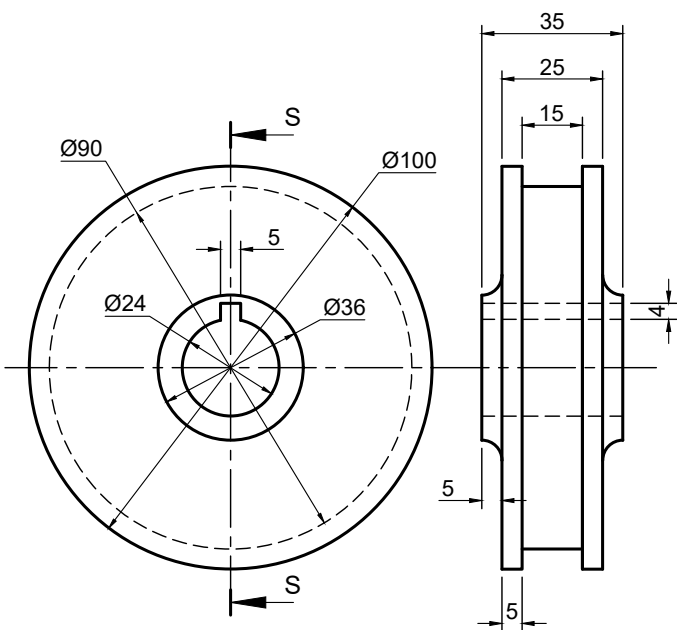
- Between 3 mm guidelines neatly label the sectional view:
SECTIONED FRONT VIEW ON AA.



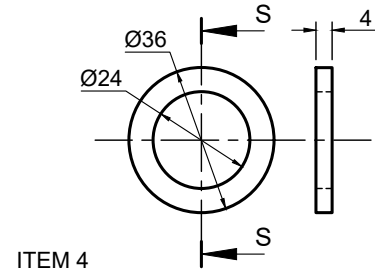
ITEM 1



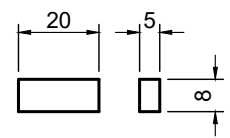
ITEM 2



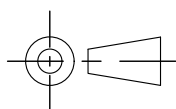
ITEM 3



ITEM 4

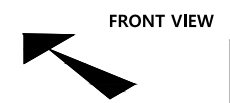
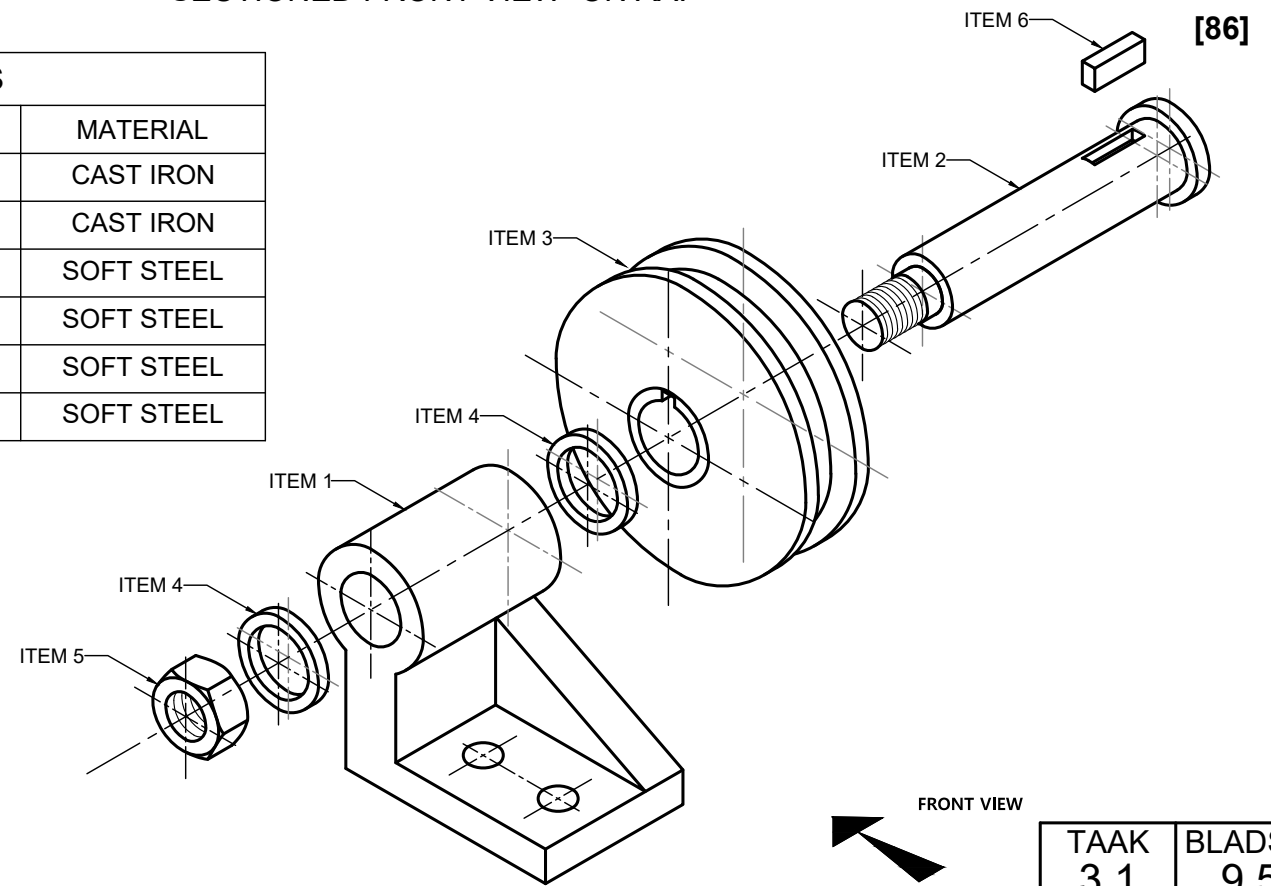


ITEM 5



ITEM 6

LIST OF PARTS			
ITEM	PART	AMOUNT	MATERIAL
1	BASE	1	CAST IRON
2	SHAFT	1	CAST IRON
3	PULLEY	1	SOFT STEEL
4	WASHER	2	SOFT STEEL
5	M 16 NUT	1	SOFT STEEL
6	KEY	1	SOFT STEEL



TITLE AND SCALE			
PROJECTION SYMBOL			
ASSESSMENT CRITERIA			
SECTIONED FRONT VIEW			
1	BASE	4	
2	SHAFT	11	
3	PULEY	11	
4	WASHER	4	
5	M16 NUT	5	
6	KEY	1	
SUB TOTAL 1		36	
LEFT VIEW			
1	BASE	7	
2	SHAFT	2	
3	PULEY	1.5	
4	WAHSER	0.5	
5	M16 NUT	4	
6	KEY	2	
SUB TOTAL 2		17	
TOP VIEW			
1	BASE	4	
2	SHAFT	6	
3	PULEY	7	
4	WASHER	3	
5	M16 NUT	4	
SUB TOTAL 3		24	
1	CENTRE LINES	3.5	
2	SECTION LINE ON AA	3	
3	PROJECTION SYMBOL	1	
4	TITLE & SCALE	1	
5	TITLE OF SECTIONED VIEW	0.5	
SUB TOTAL 4		9	
TOTAL		86	
TOTAL PENALIZATION (-1)			
GRAND TOTAL			



MECHANICAL ASSEMBLY

ESTIMATED TIME FOR COMPLETION
YOUR TIME OF COMPLETION

45 MIN
MIN

GRADE
11

NAME &
SURNAME

TASK
3.1

PAGE
9.6