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Internal Assessment Test III –Nov. 2019

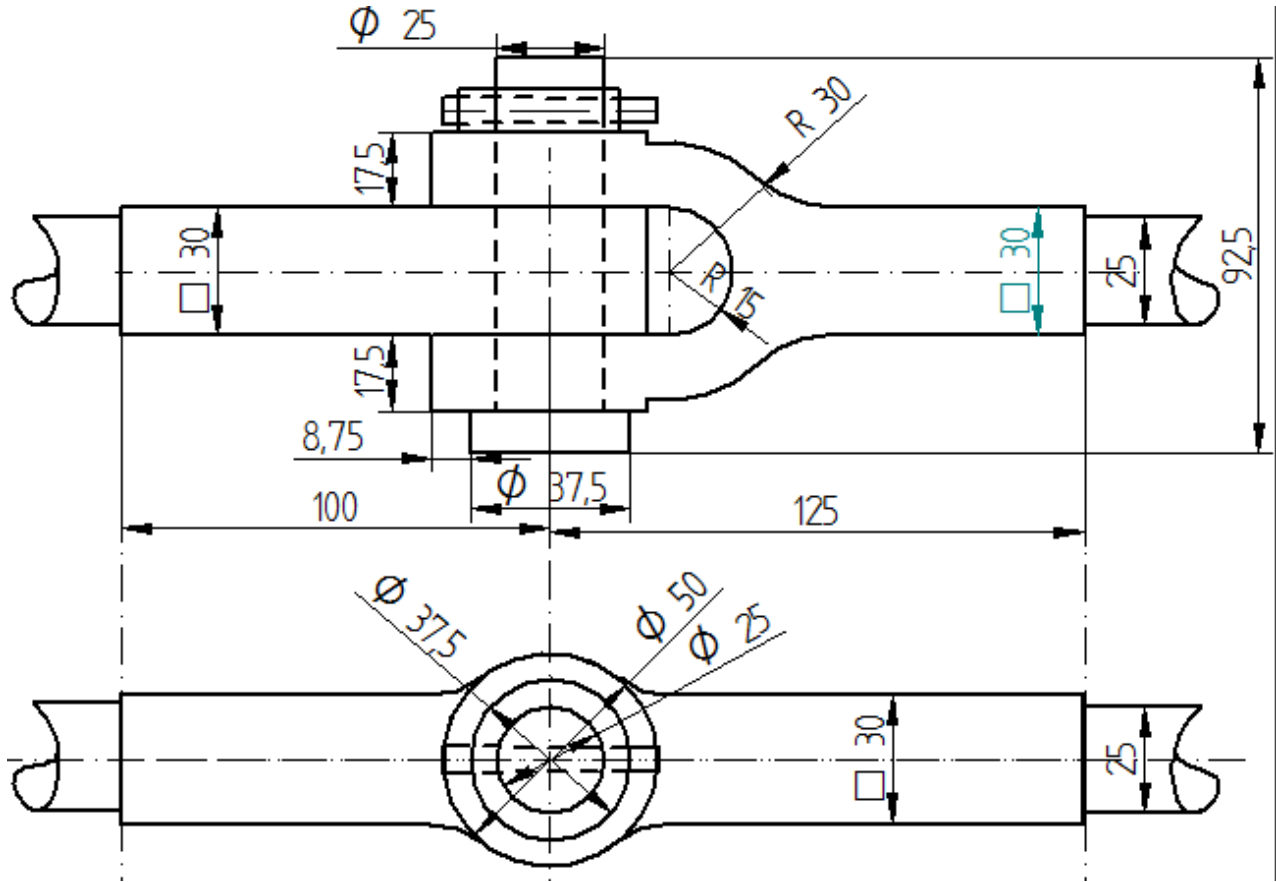
Sub:	Computer Aided Machine Drawing	Sub Code:	18ME36A	Branch:	MECH.
Date:	19.11.2019	Duration:	90 min's	Max Marks:	50
		Sem / Sec:	3 (A&B)		

Scheme & Solution

1. Draw two views of knuckle joint assembly by taking shaft diameter of 25mm and indicate all dimensions.

20 Marks

Solution:



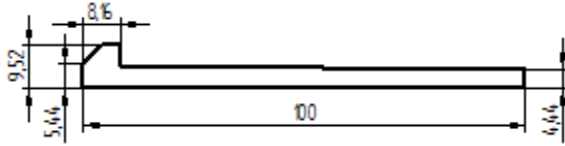
Scheme:

- Calculation – 02 Marks
- Dimensions – 03 Marks
- Sketch F V - 10 Marks
- T V - 05 Marks

2. Draw an assembly of shaft and a hub showing Gib head key. Take shaft diameter equal to 25mm.
Indicate all dimensions & proportions

10 Marks

Solution:



Gib head key

Width of the key = $0.25D + 2$ mm = 8.25mm

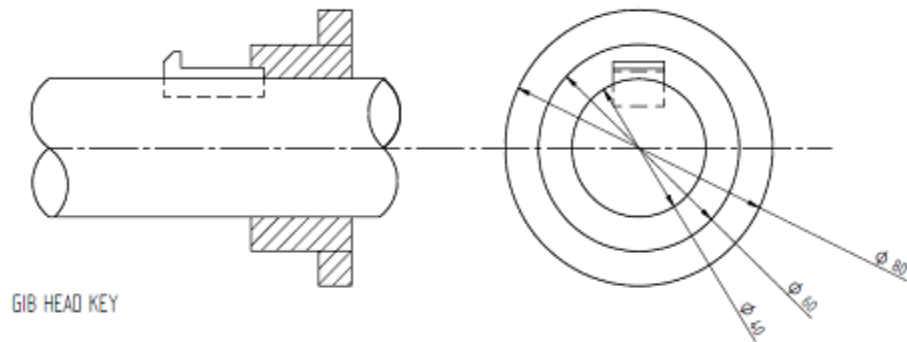
Thickness of key = $0.66W = 5.445$ mm

Length of the key = 100mm

Taper = 1:100

Height of gib head = $1.75t = 9.52$ mm

Width of gib head = $15t = 8.16$ mm



Scheme:

Calculation – 01 Marks

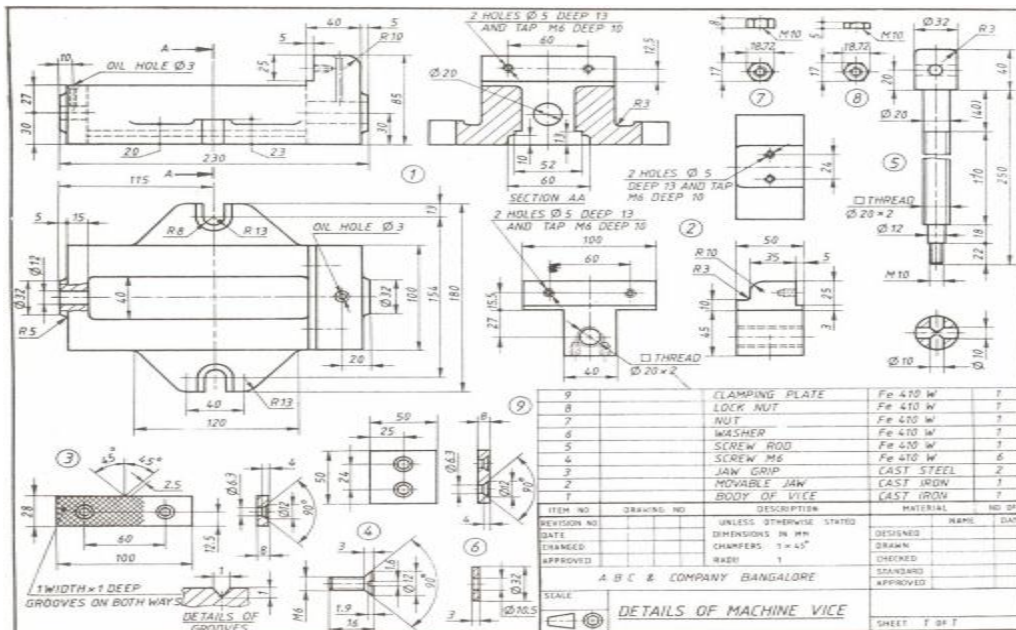
Key to scale - 05 marks

Assembly of key – 04 marks

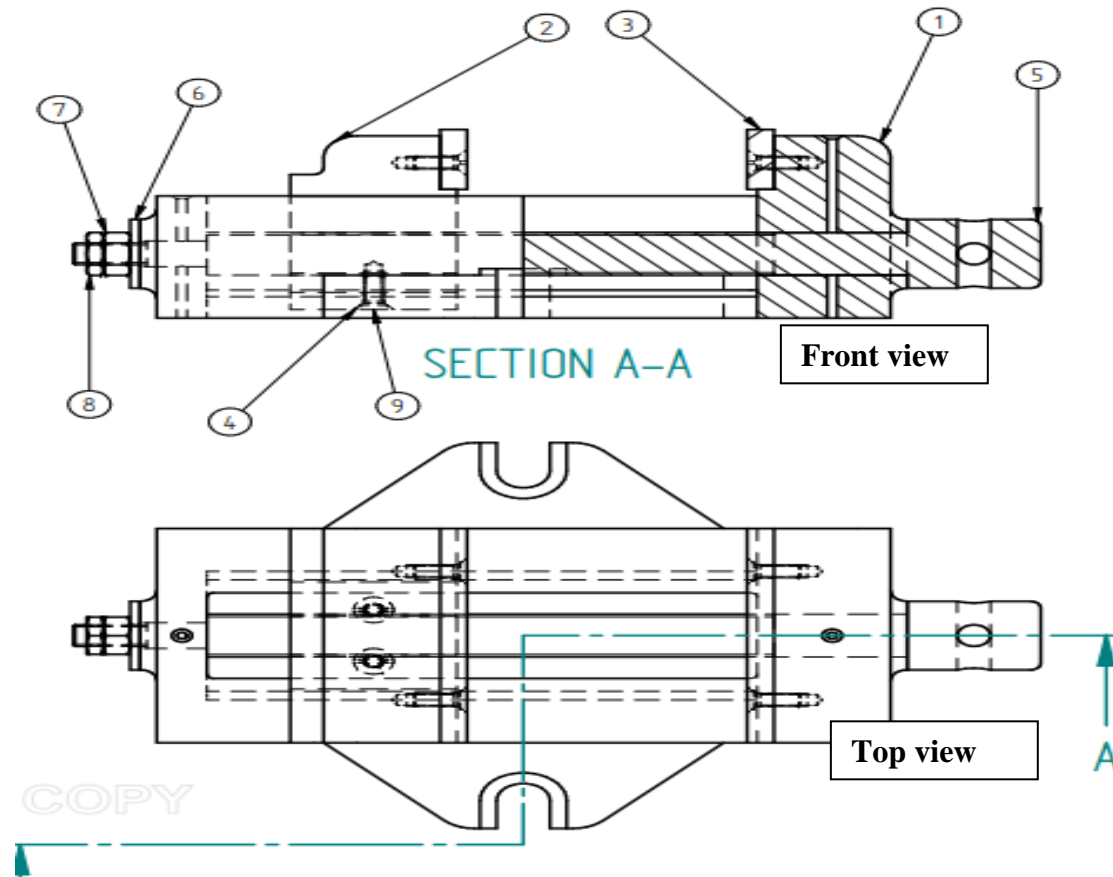
3. Figure shows the details of Machine vice. Assemble the parts and show

(a) Front view (b) Top view

20 Marks



Solution:



Scheme:

Front view - 10 Marks
Top View - 10 marks