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Internal Assessment Test II – Oct. 2019

Sub:	Computer Aided Machine Drawing	Sub Code:	18ME36A	Branch:	MECH.
Date:	15.10.2019	Duration:	90 min's	Max Marks:	50
		Sem / Sec:	3 (A&B)		

Scheme & Solution

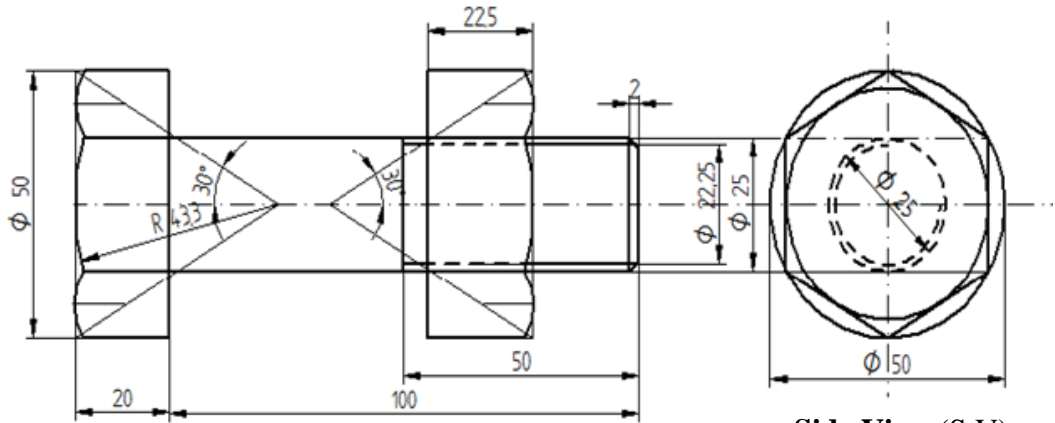
1. Draw two views of a hexagonal headed bolt and nut with washer (assembly) for a 25mm diameter bolt. Take the length of the bolt equal to 100mm and a thread length of 50mm (Across corners).

25 Marks

Solution:

Calculation:

- $d=25\text{mm}$
- $Wc=2d =50\text{mm}$
- $Bt= 0.8d=20\text{mm}$
- $Nt=0.9d= 22.5\text{mm}$
- $Rd = 0.9d=22.5\text{mm}$
- $Wd=2d+3=53\text{mm}$
- $Wt=0.12d=3\text{mm}$



Front View (FV)

Side View (S V)

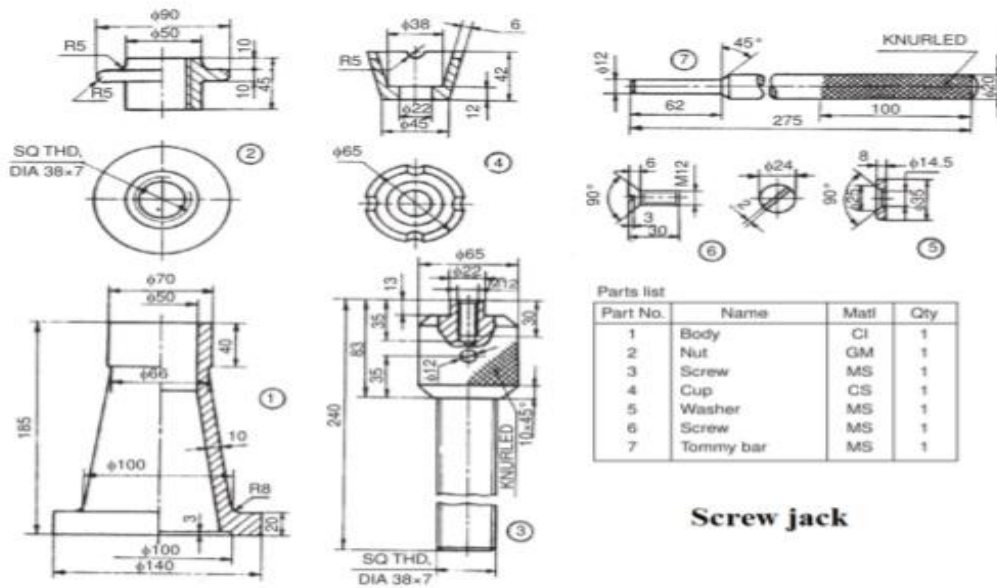
Scheme:

- Calculation – 5 Marks
- Dimensions – 4 Marks
- Sketch F V - 10 Marks
- S V - 6 Marks

2. Figure shows the details of Screw Jack. Assemble the parts and show

(a) Front view (b) Top view

25 Marks



Screw jack

Solution:

Scheme:

Front view - 15 Marks
Top View - 10 marks

