CBCS SCHEME

17AU45

USN

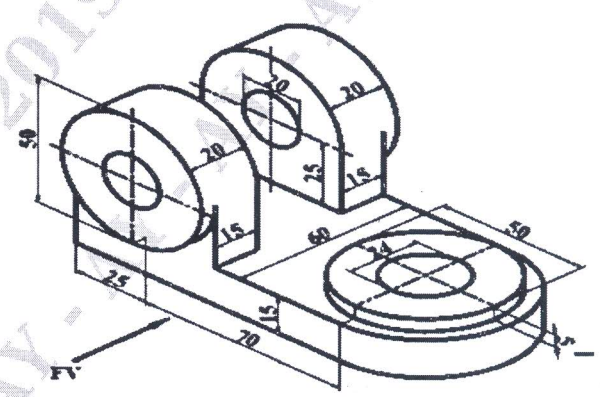
Fourth Semester B.E. Degree Examinations, December 2019

AUTOMOBILE ENGINEERING (AU)

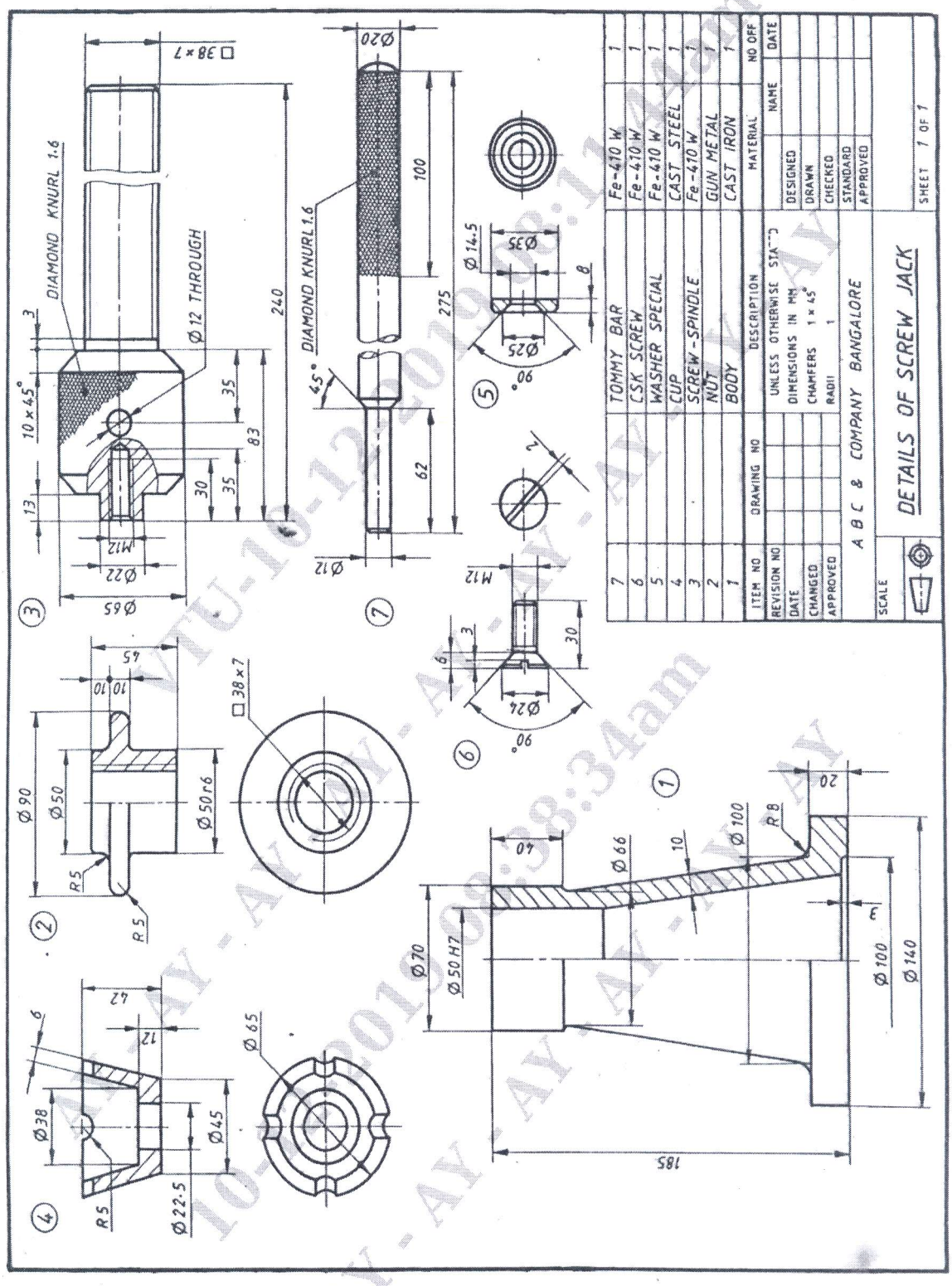
COMPUTER AIDED MACHINE DRAWING

Time: 3 Hours **Max. Marks: 100**

Note: 1. Answer any ONE question from each of the parts A, Band C.
2. Use **FIRST ANGLE** projection only.
3. Missing data if any may suitably Assumed.
4. All the calculations should be on answer sheet supplied.
5. All the dimensions are in mm.
6. **Part C Assembled View should be in 3D and other 2 views in 2D.**

Sl. No.	Question	Marks
	Part A	
Q.No.1	A Pentagonal pyramid of 20mm edge of base and 40mm high stands vertically with its base on HP and an edge of the base perpendicular to VP. A section plane perpendicular to HP and inclined 30° to VP cuts the pyramid such that it passes through the pyramid at a shortest distance of 5mm from its axis and in front of it. Draw its sectional front view and project the true shape of the section.	20
Q.No.2	The pictorial view of an object is shown in the fig1. draw the following views: i) Front view ii) Top view iii) Left view.  Fig 1.	20

	Part B	
Q.No.3	Sketch Sectional Front view and Top view of the Single riveted Chain Butt joint, with single strap taking thickness t = 9 mm. Indicate dimensions. (Minimum three rows).	**20**
Q.No.4	Draw the following views of a " Universal Coupling" used to connect two 20mm diameter shafts. a)Sectional Front view b) Profile view	**20**
	Part C	
Q.No.5	Part drawings of Screw Jack assembly are shown in following figure 2. Assemble the parts and draw the following views. a) Front view in section b) Top view	**60**
Q.No.6	Details of MACHINE VICE are shown in the following Figure 3. Assemble the parts and draw the following views. a) Sectional front view b) Top view	**60**



Details of a Screw Jack

Fig: 2 Details of Screw Jack

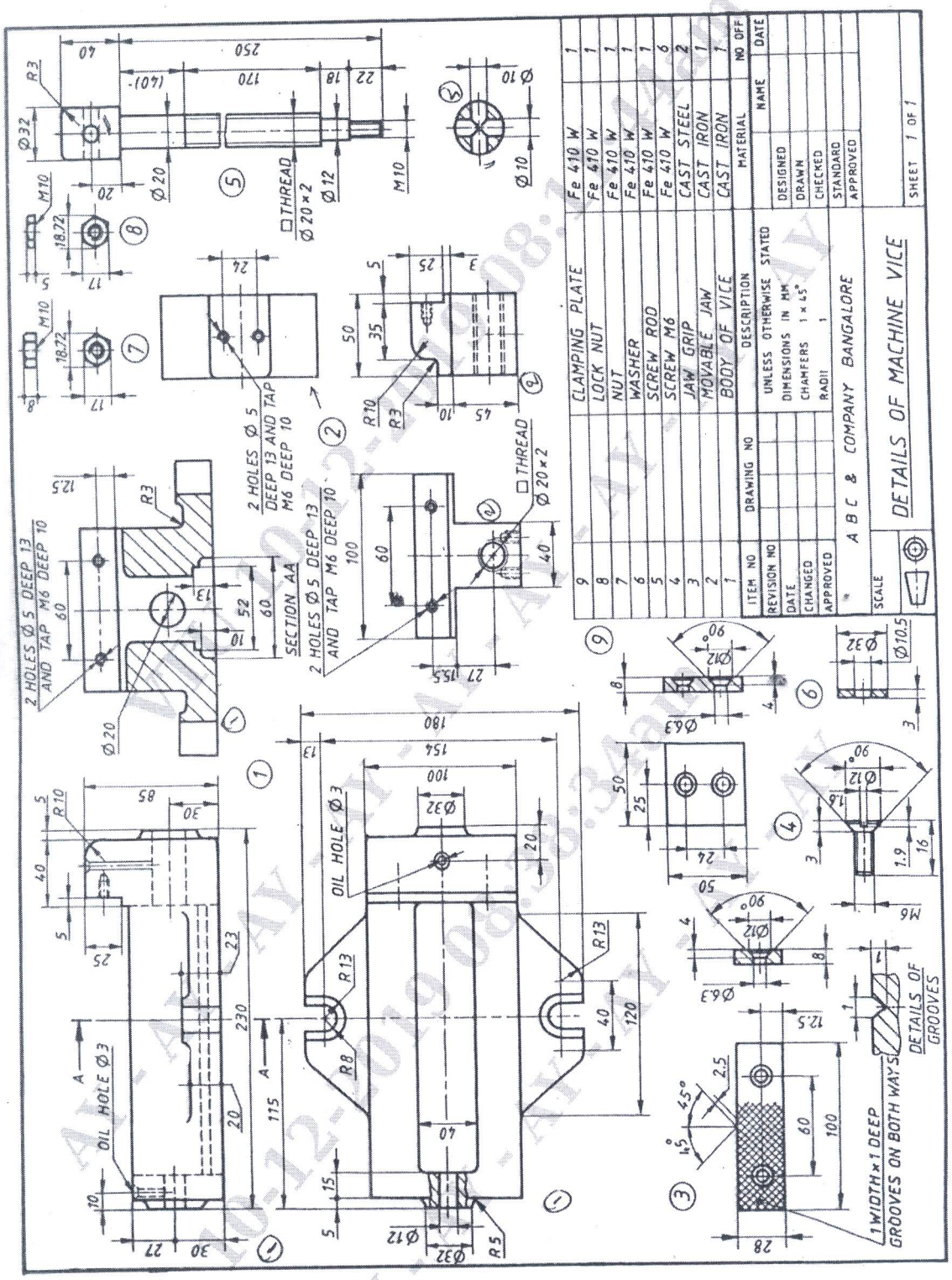


Fig: 3 Details of Machine Vice

Details of a Machine Vice