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Third/Fourth Semester B.E. Degree Examination, July/August 2021

(ME/MA)

COMPUTER AIDED MACHINE DRAWING

Time: 3 Hours

Max. Marks: 80

- Note:** 1. Answer any ONE question from each of the parts A, B and C.
2. Use **FIRST ANGLE** projection only.
3. Missing data if any may suitably be 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.**

PART - A

- Q.No.1** A cone of side of base diameter 50mm and axis length 65mm is rests with its base on HP. Draw the true shape of the section made by a section plane perpendicular to the VP and inclined to the HP at 50° and passing through an end point on the circumference of the base circle of the cone. **(15 Marks)**
- Q.No.2** Draw the following to indicate conventional representation of (a) ISO Metric thread (Unified Thread) having pitch of 50mm. Show at least 03 threads in section. **(15 Marks)**

PART - B

- Q.No.3** Draw to 1: 1 scale the top and sectional front views of a single riveted butt joint with Double cover plate. The thickness of the plates is 9mm. show at least three rivets in each row. Indicate all the dimensions. Use snap head rivets. **(15 Marks)**
- Q.No.4** Draw sectional front view and side view of a Universal Coupling to connect two rods of diameter 20mm. Indicate all dimensions. **(15 Marks)**

PART - C

- Q.No.5** Figure 1 shows the details of a "MACHINE VICE". Assemble the parts and draw
(a) Sectional Front View. (b) Top View. **(50 Marks)**
- Q.No.6** Figure 2 shows the details of a "SQUARE TOOL POST" of a lathe. Assemble the parts and draw.
(a) Sectional front view. (b) Top view. **(50 Marks)**

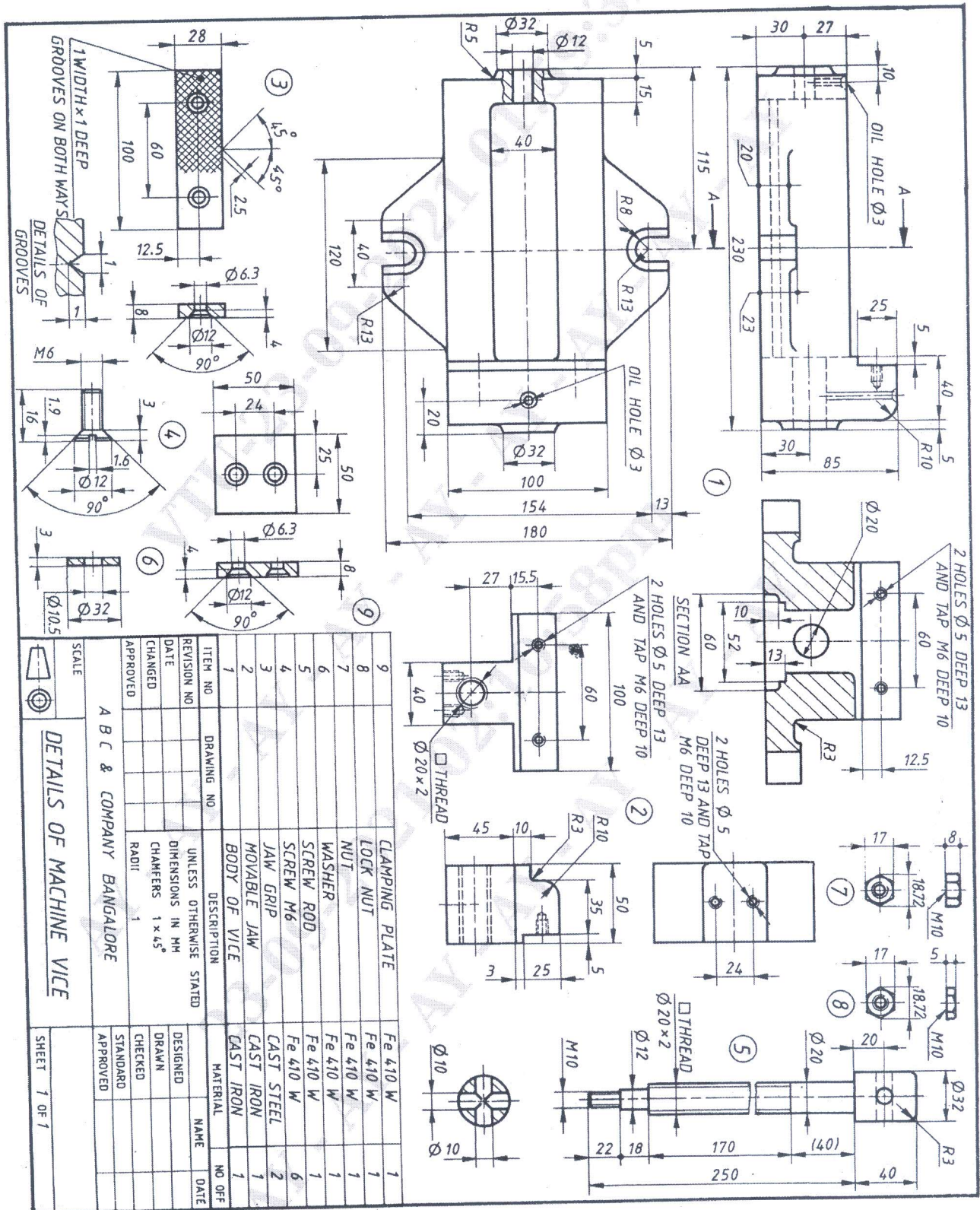
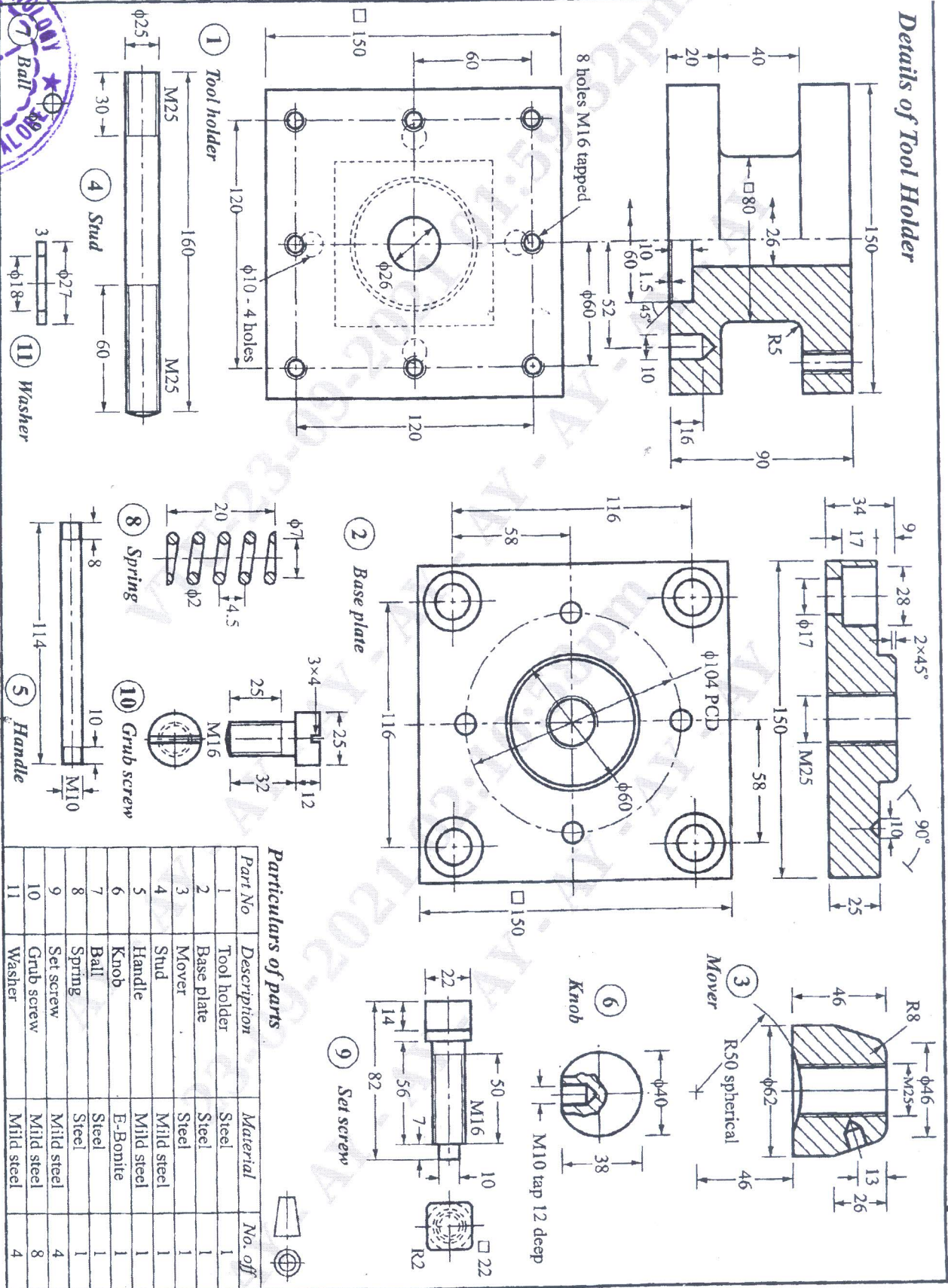


Figure 1 "MACHINE VICE".

Details of Tool Holder



Particulars of parts

Part No	Description	Material	No. off
1	Tool holder	Steel	1
2	Base plate	Steel	1
3	Mover	Steel	1
4	Stud	Mild steel	1
5	Handle	Mild steel	1
6	Knob	E-Bonite	1
7	Ball	Steel	1
8	Spring	Steel	1
9	Set screw	Mild steel	4
10	Grub screw	Mild steel	8
11	Washer	Mild steel	4

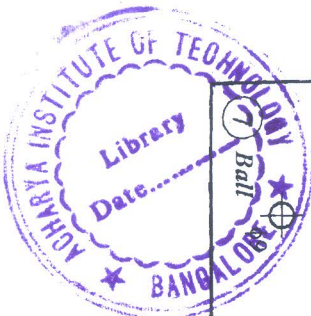


Figure 2. "SQUARE TOOL POST"