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15ME36A/15ME46A/15MEA306/15MEA406

Third/Fourth Semester B.E. Degree Examination, Feb./Mar. 2022

(ME/MA)

COMPUTER AIDED MACHINE DRAWING

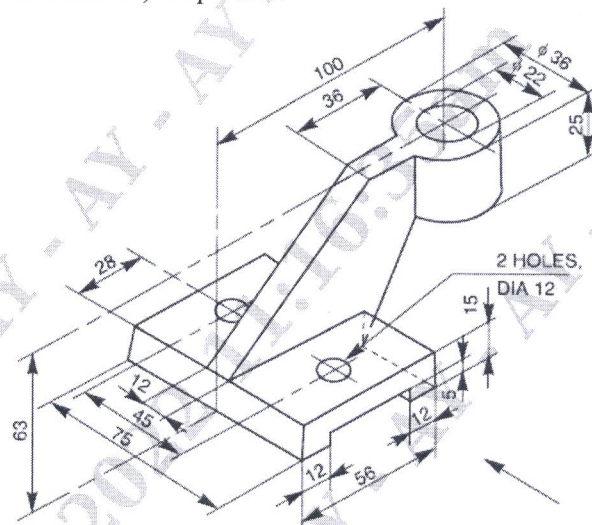
Time: 3 Hours

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** The pictorial view of a Machine Part is shown below, Draw the following views: i) Front View and ii) Side View and iii) Top view. **(15 Marks)**



- Q.No.2** Draw two views of the Square Headed Bolt with nut for a 30mm diameter bolt. Take length of the bolt is 100mm. **(15 Marks)**

PART - B

- Q.No.3** Draw to 1:2 Scale the top and sectional front views of a double riveted lap joint with Zig-zag riveting. 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)**

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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 an "RAMSBOTTOM SAFETY VALVE". Assemble the parts and draw the following views. Dimension the drawings.
(a) Front View with top half in section. (b) Top View. **(50 Marks)**

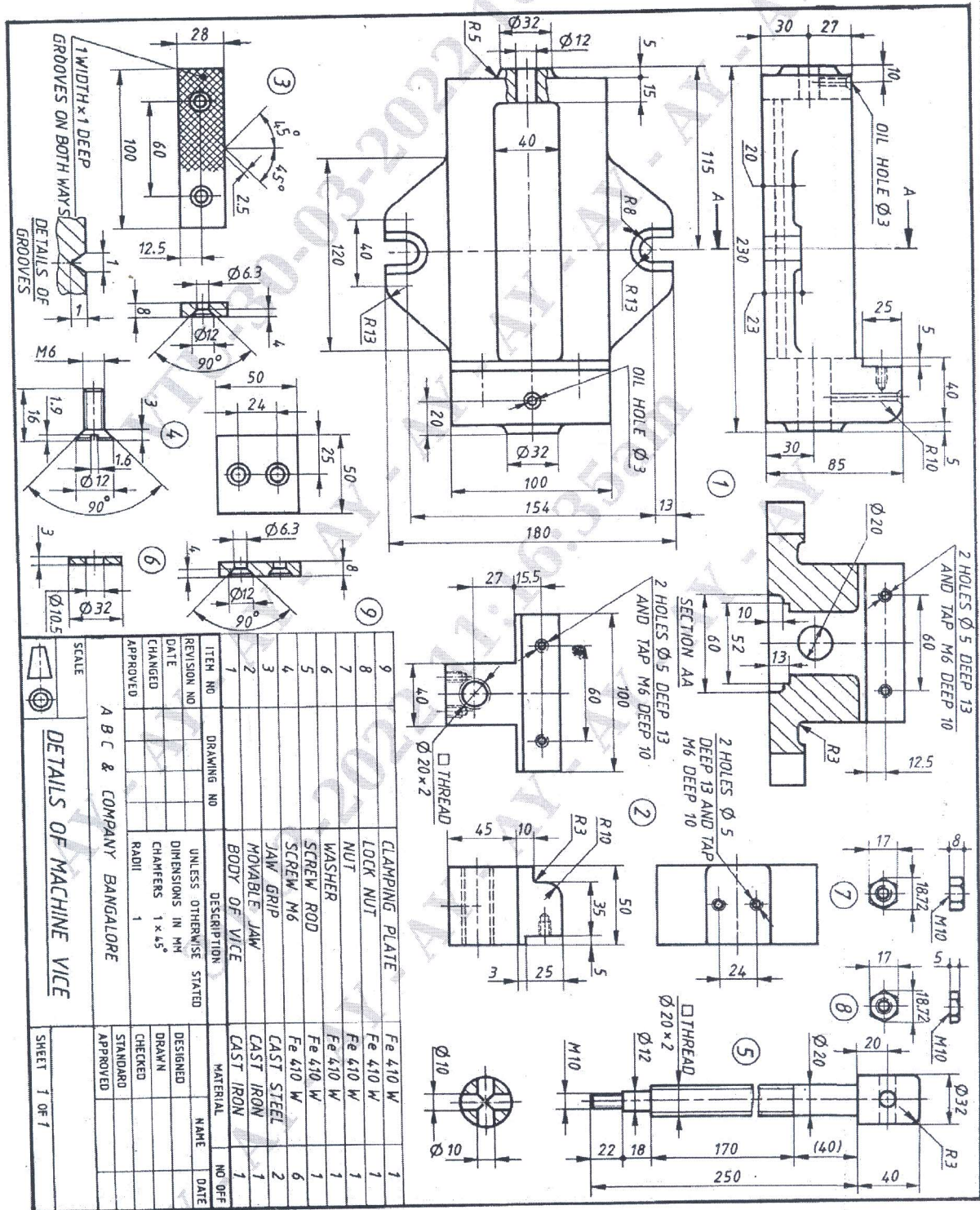


Figure 1 "MACHINE VICE"

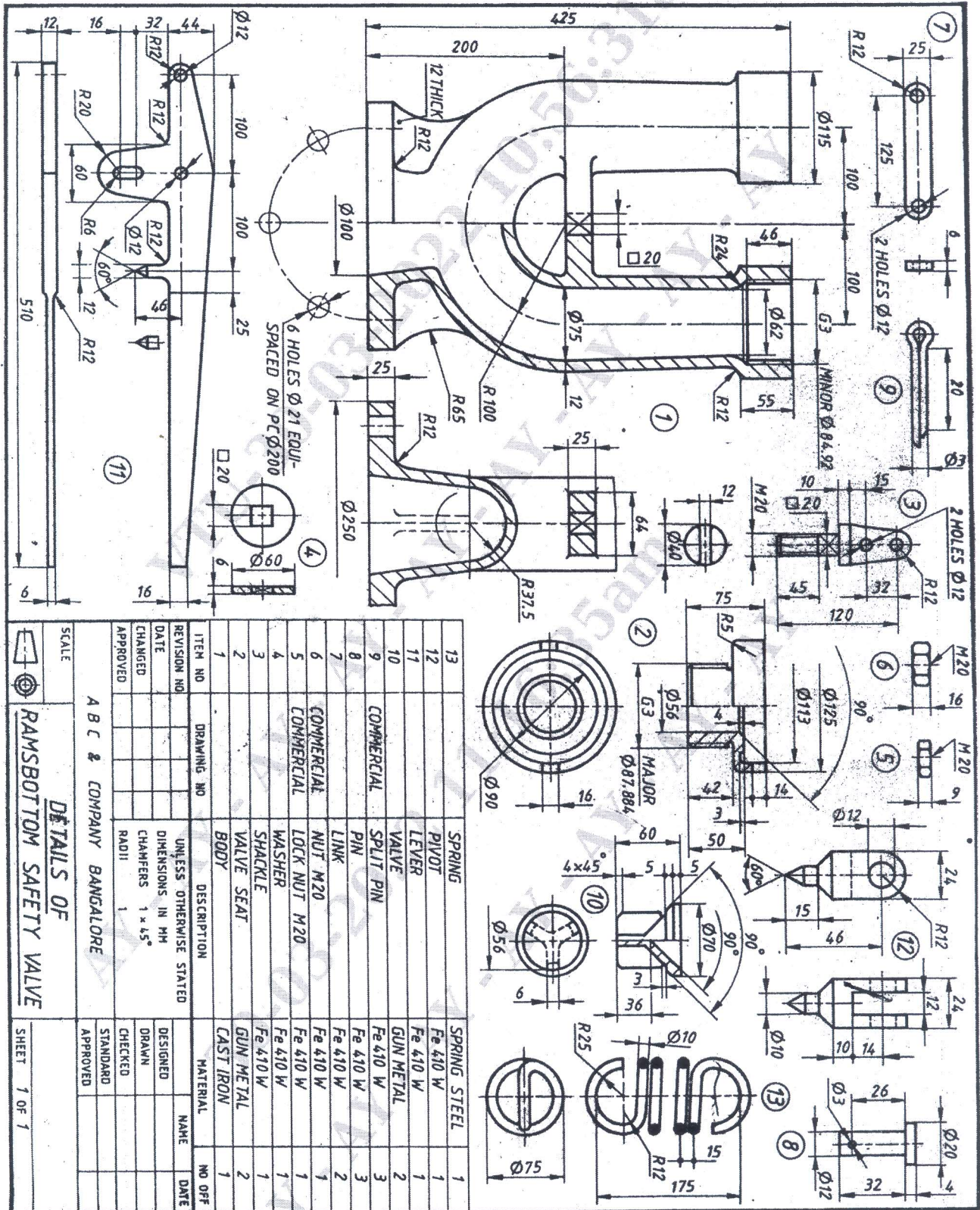


Figure 2 "RAMSBOTTOM SAFETY VALVE".