

06/06/2012 – 8.30am to 11.30am

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10ME36A/46A

**Third/Fourth Semester B.E. Degree Examination, June 2012**  
**(ME/IP/IM/MA/AE)**

**COMPUTER AIDED MACHINE DRAWING**

Time: 3 Hours

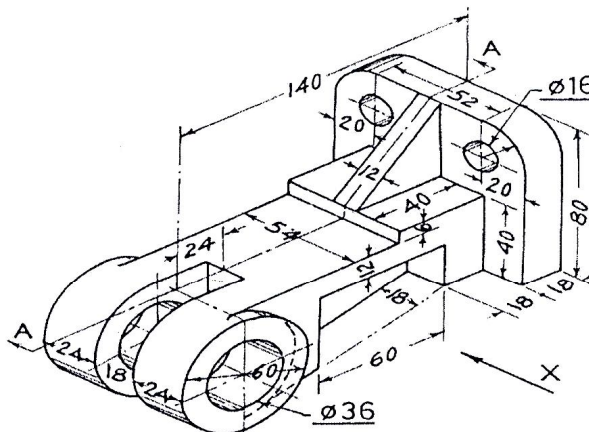
Max. Marks: 100

- Note: 1. Answer any ONE question from each of the parts A, B and C.  
 2. Use FIRST ANGLE Projections only.  
 3. If any data is missing it may be suitably assumed and mentioned.  
 4. All the calculations should be on the answer sheet supplied.  
 5. All the dimensions are in mm.  
 6. Drawing instruments may or may not be used for sketching.  
 7. Part C assembled view should be in 3-D and other views in 2-D

**PART – A**

- 1) Draw the following views for the given machine component.  
 a) Sectional Front View  
 b) Top view and  
 c) Left side view

[20 Marks]



- 2) Draw the profile of i) ISO screw thread ii)BSW thread of pitch 40mm.  
 Indicate all the proportions and dimensions.

[20 Marks]

**PART – B**

- 3) Draw the sectional front view and top view of a double-riveted butt joint with double cover straps to connect two plates of 12mm thickness. Use snap head rivets with zigzag riveting arrangement and show all the calculations on the answer sheet.

[20 Marks]

- 4) Draw the side view and sectional front view of an Oldham's coupling by taking the shaft diameter as 20mm. [20 Marks]

**PART – C**

- 5) Figure 1. Shows the details of a Ramsbottom Safety Valve. Assemble the parts and draw i) Front View ii) Top view iii) Assembled 3D view. [60 Marks]

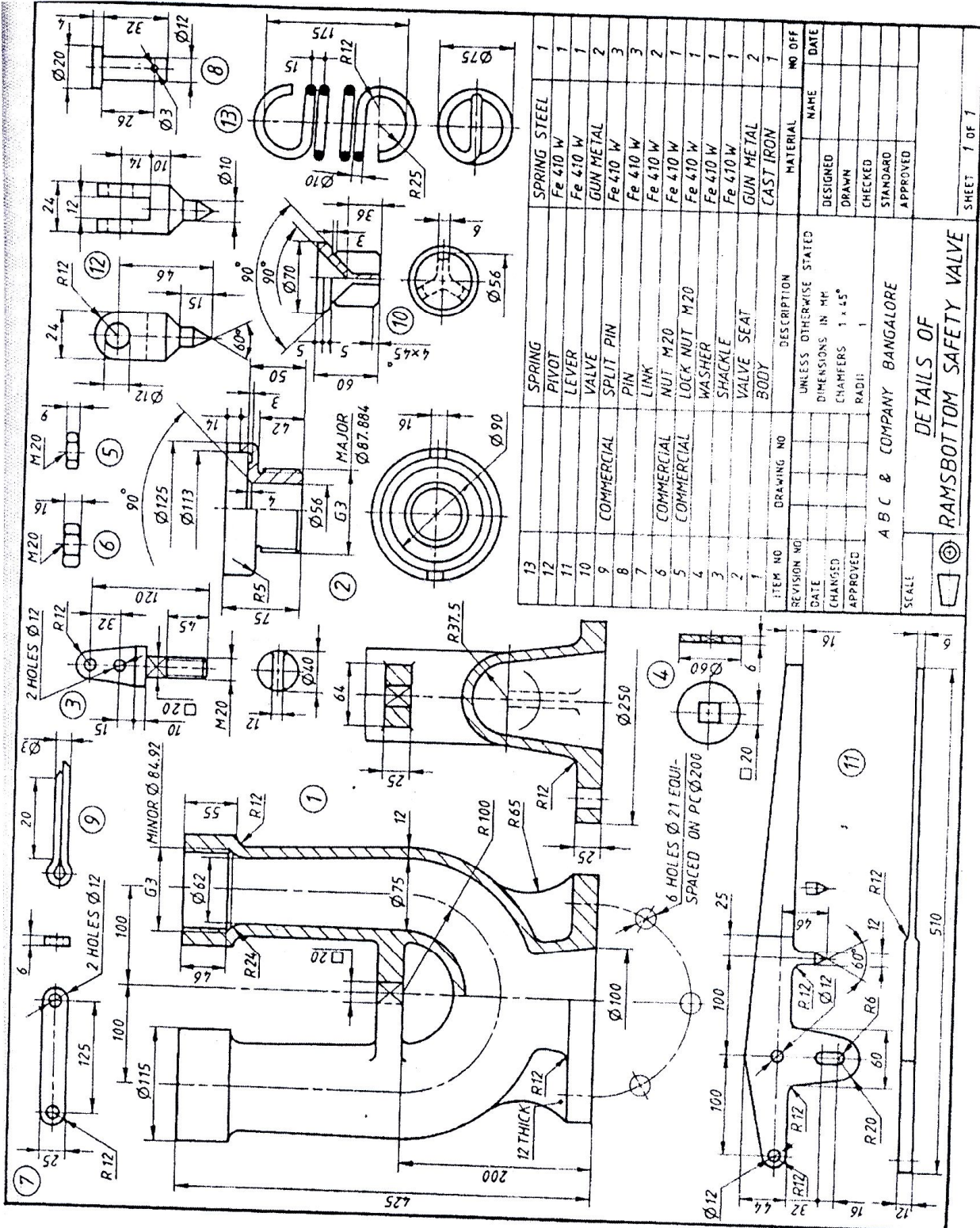


FIGURE 1

Details of a Ramsbottom Safety Valve

Fig. 22.14

6) Figure 2. Shows the details of a Machine Vice. Assemble the parts and draw i) Sectional Front View ii) Top view iii) Assembled 3D view.

[60 marks]

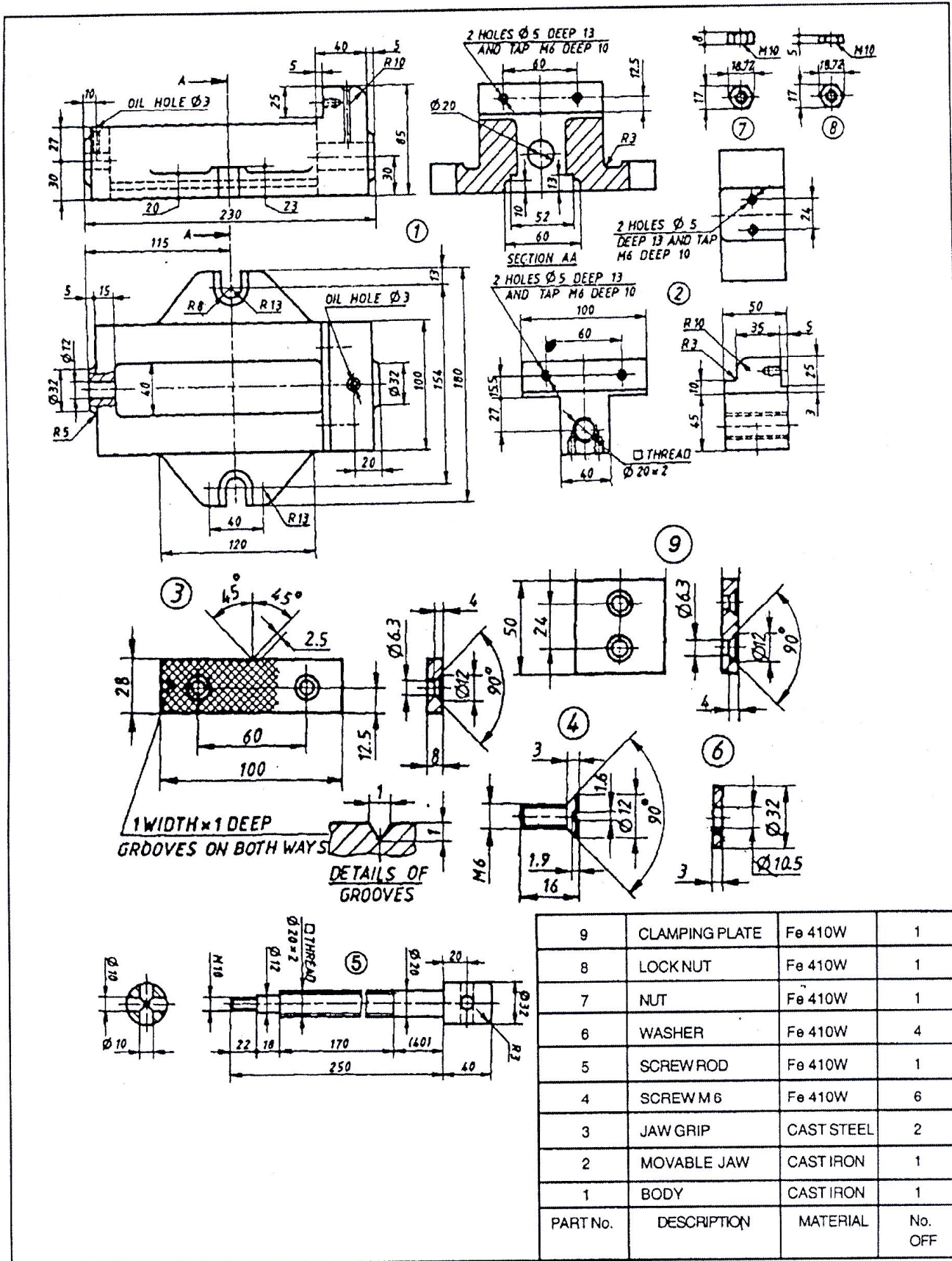


Fig. 9.22 Detail Parts View of Machine Vice

Figure 2