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Third Semester B.E. Degree Examination
(MECHANICAL)
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

1. A right regular hexagonal pyramid with edge of base 40mm and height 100mm stands with its base on HP with two of its base edges parallel to VP. It is cut by a plane passing through a point on the axis 50mm from the base and inclined at 20° to be the horizontal plane and perpendicular to the profile plane. Project the sectional view and the true shape of section. **15 Marks**

2. Draw the following profiles.

- a) ACME thread of pitch 45mm
 b) External and internal BSW thread of pitch 50mm **15 Marks**

PART B

3. Draw the proportionate sketch of locking of Flanged Nut for a 20mm diameter bolt using Split Pin. **15 Marks**

4. Sketch protected type Flange Coupling to connect two shafts as per the instruction given below.

(i) Half Sectional Front View (ii) Right Side View Diameter of the shaft: 25mm

15 Marks**PART C**

5. Details of 'PLUMMER BLOCK' are shown in following Figure 1. Assemble the parts and draw the following views of the assembly.

- i. Sectional Front View
 ii Top View

50 Marks

6. Figure 2 shows the details of 'RAMS BOTTOM SAFETY VALVE'. Assemble the parts and draw the following views of the assembly.

- i. Half Sectional Front view
- ii. Top view

50 Marks

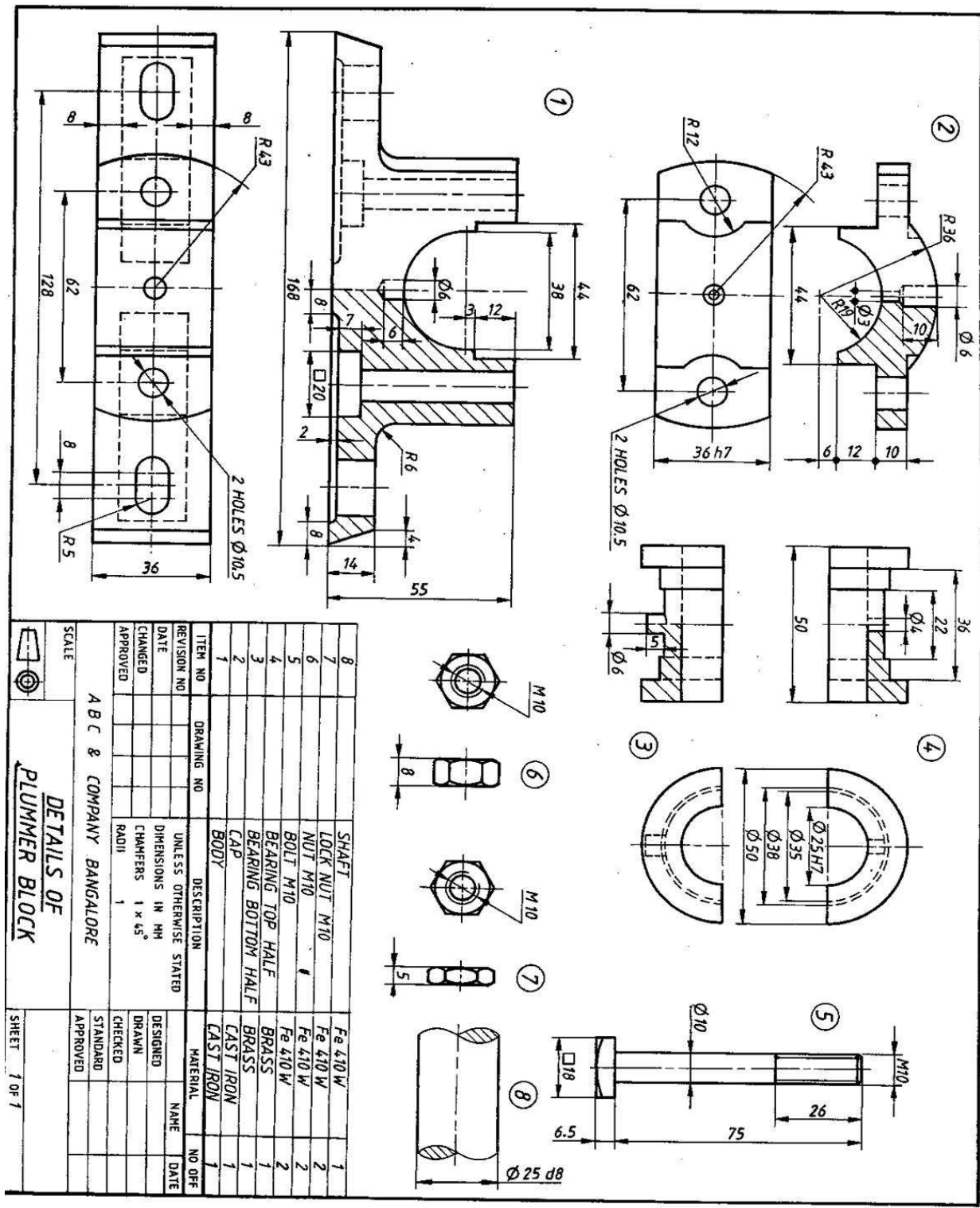


Figure 1 'PLUMMER BLOCK'

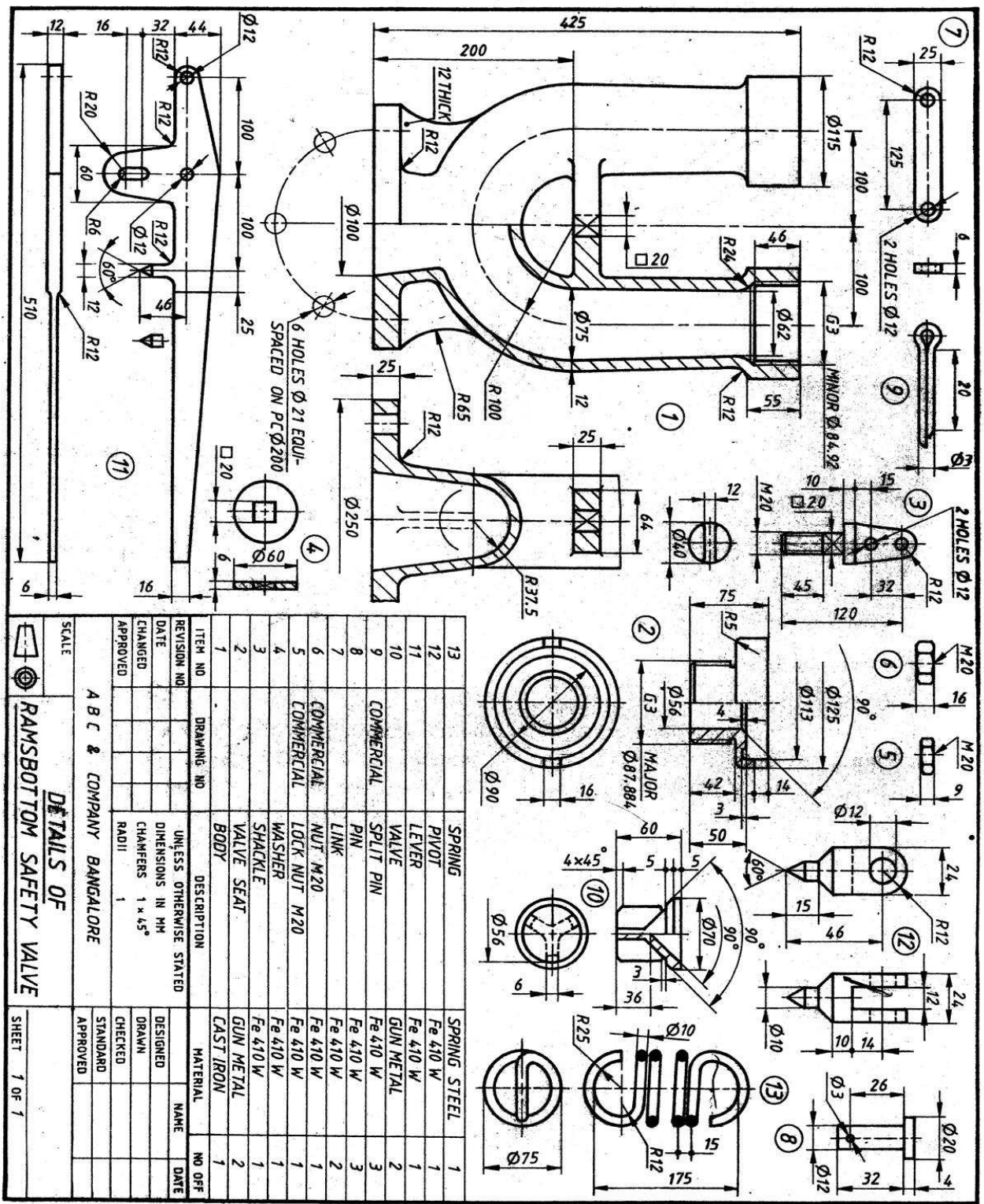


Figure 2 'RAMS BOTTOM SAFETY VALVE'