Register Number: …….

B.E. DEGREE EXAMINATIONS: NOV/DEC 2012

Third Semester

MECHANICAL ENGINEERING

MEC104: Machine Drawing

Time: Four Hours **Maximum Marks: 100**

Answer ALL Questions:-

PART A (10 x 2 = 20 Marks)

1. Sketch the five types of lines used in Machine drawing.
2. Draw the convention of a round section.
3. Explain the third angle projection.
4. Name two head forms of rivets.
5. Define geometric tolerance.
6. What is the difference between lead and pitch?
7. What are the functions of connecting rod in IC engines?
8. Mention various types of couplings.
9. Sketch the symbol of fillet welding.
10. List out the types of keys

PART B (1 x 20 = 20 Marks)

11. a) Sketch the half sectional front view of a flanged coupling – protected type with the proportions expressed in terms of the diameter d of the shafts. Draw the Front view in section to 1:1 scale, assuming d = 30 mm.

(OR)

b) Sketch the sectional front view of a cotter joint with sleeve of the assembled joint to 1:1 scale, assuming d= 20 mm.

PART C (1 x 60 = 60 Marks)

12. a) The details of Tail stock are shown in Fig.1 assemble all the parts correctly and draw the front view in section of the assembled tailstock to 1: 1 scale.

(OR)

b) Details of a rams bottom safety valve are show in Fig. 2. Draw the assembled front view showing one half in sections**.**

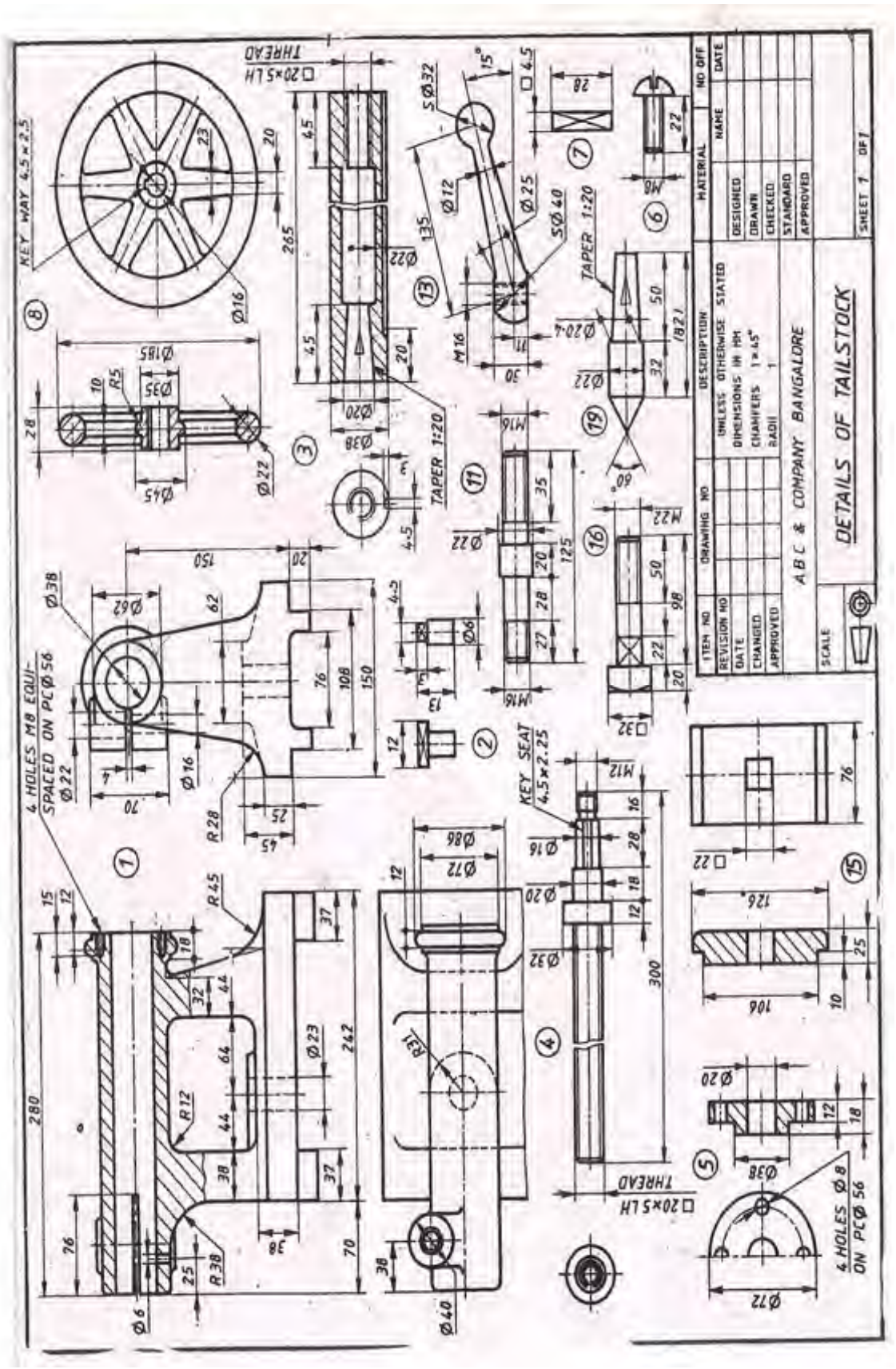

Fig .1 Tail stock

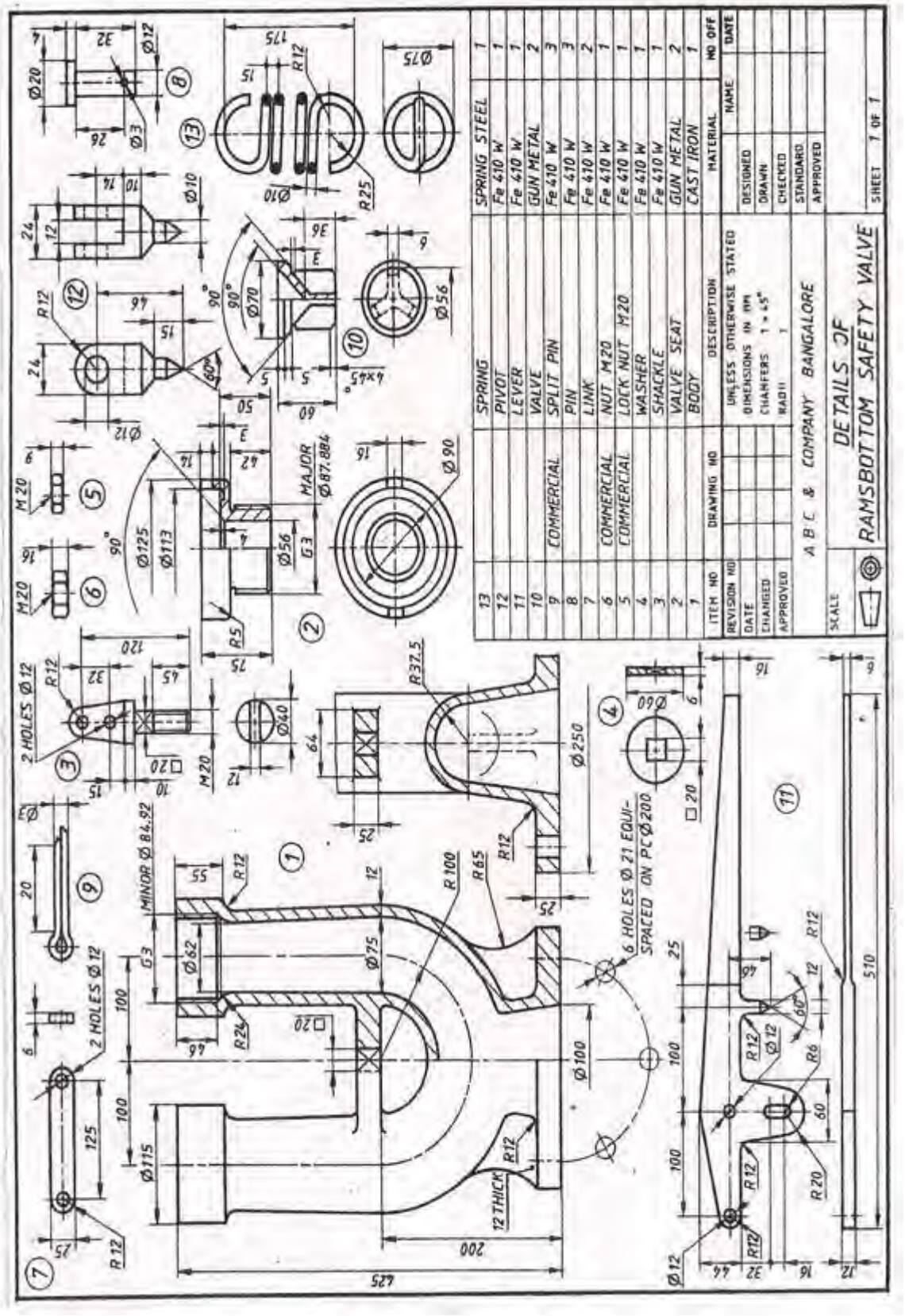

Fig. 2 Rams Bottom Safety Valve