

R13

Code No: 114DA

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech II Year II Semester Examinations, May - 2017

MACHINE DRAWING

(Common to ME, AME, MSNT)

Time: 3 Hours

Max. Marks: 75

Answer any THREE questions from Part-A
Part-B is Compulsory

PART- A

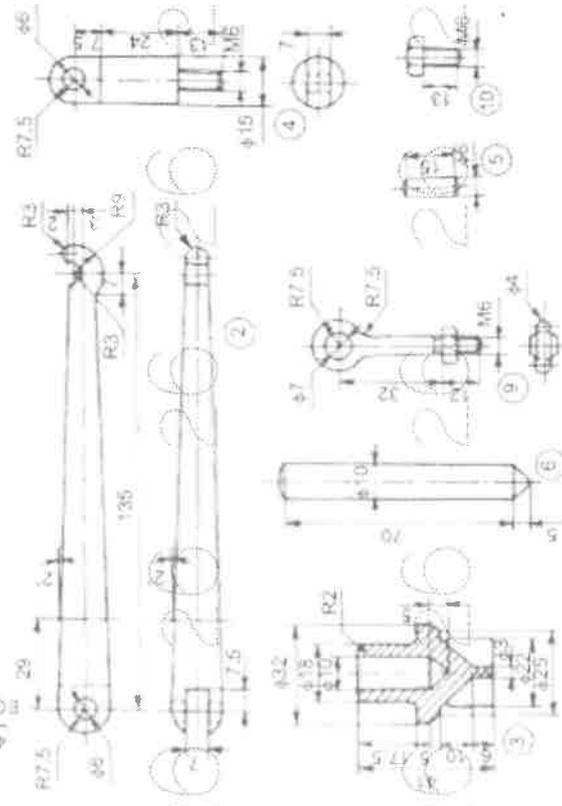
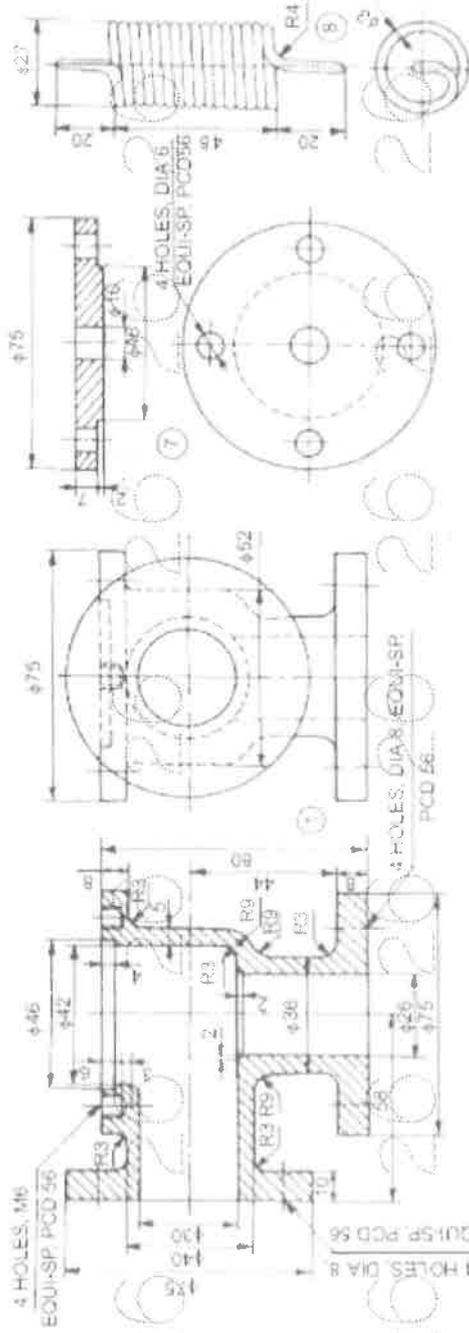
[3 × 10 = 30 Marks]

1. Draw the sectional front view and top view of two 20 mm thick plates fastened together by means of 20 mm diameter stud, a hexagonal nut and a washer. Insert important dimensions. [10]
2. Draw the sectional front and side view of a cotter-joint with two sleeves and each sleeve is having a width of 32 mm and thickness 6 mm and the clearance is 3 mm and taper as 1 in 30. [10]
3. Draw neatly, a sectional front view and top view of a single riveted butt joint for two 10 mm thick plates, using two butt-straps. Show all the dimensions in your drawing. [10]
4. Draw the half sectional front view and side view of a journal bearing which can accommodate 40 mm diameter shaft. [10]

PART - B

[1 × 45 = 45 Marks]

5. Assemble the parts of spring loaded safety valve for the parts shown in Figure and draw the:
a) sectional front view
b) right side view. [45]



Parts list

| S. No. | Name | Matl. | Qty. |
|--------|-------------------|-------|------|
| 1 | Valve body | CI | 1 |
| 2 | Lever | MS | 1 |
| 3 | Valve | GM | 1 |
| 4 | Fulcrum bolt | MS | 1 |
| 5 | Fulcrum pin | MS | 1 |
| 6 | Stem | MS | 1 |
| 7 | Flange | CI | 1 |
| 8 | Tension spring | HCS | 1 |
| 9 | Tension adjusting | MS | 1 |
| 10 | nut with nut | MS | 3 |