

**R15**

Code No: 124DA

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

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

**MACHINE DRAWING**

(Common to ME, MCT, AME, MSNT)

**Time: 3 Hours**

**Max. Marks: 75**

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

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**PART- A**

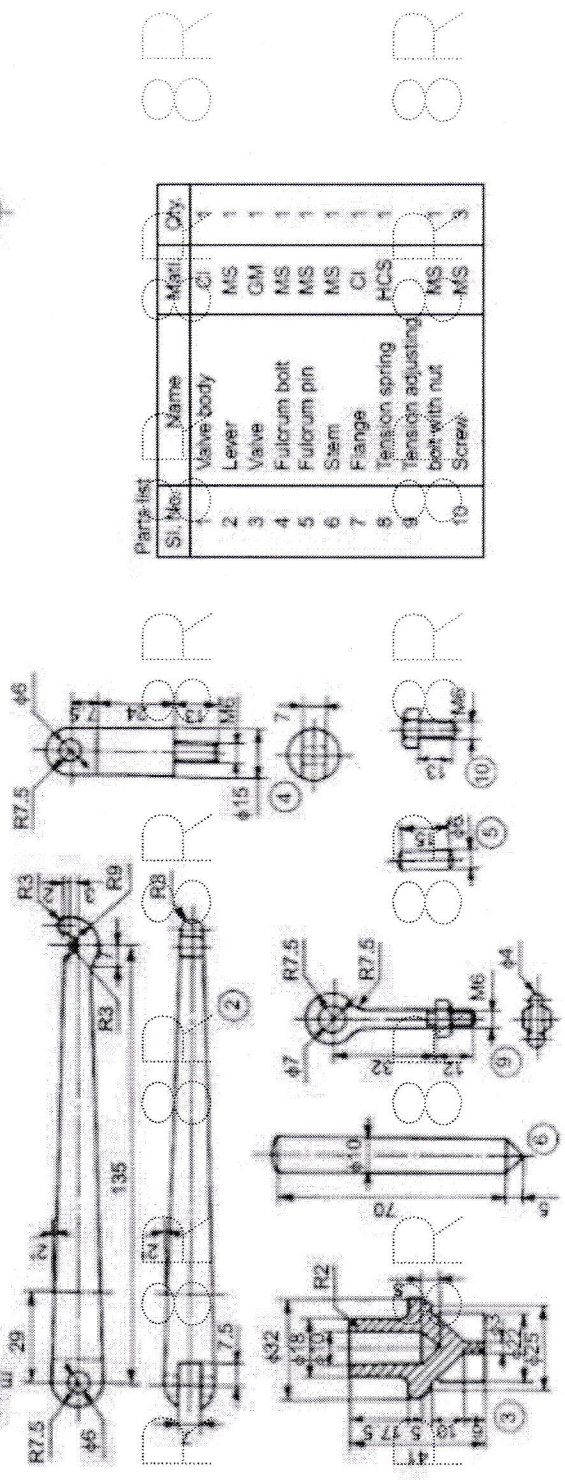
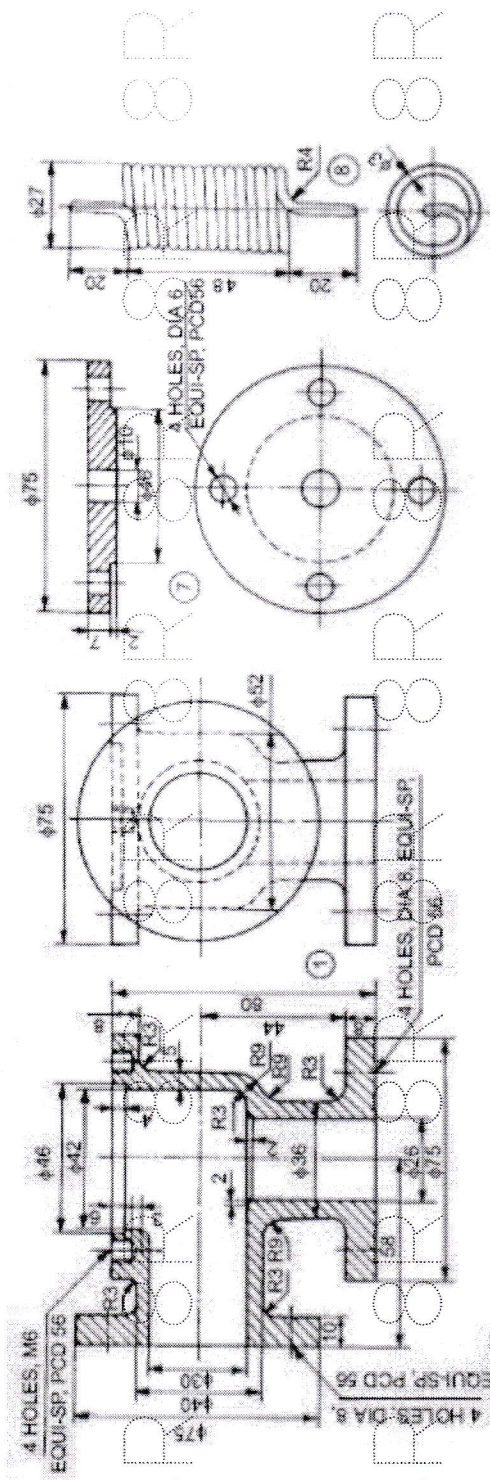
**[3 × 10 = 30 Marks]**

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]



Sl. 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 bolt with nut	MS	1
10	Screw	MS	3