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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
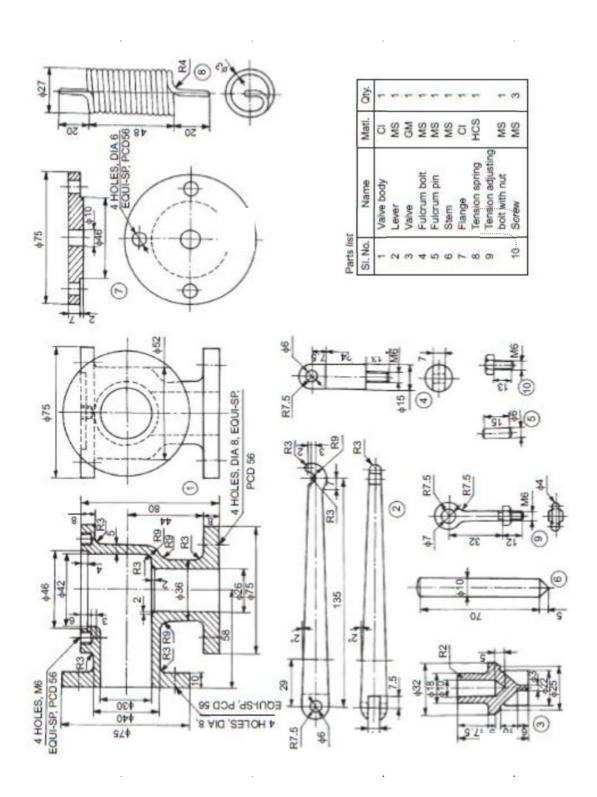**Part-B is Compulsory**
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PART- A

[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]

Parts list

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