**CE101 Engineering Drawing July- Nov 2019**

**Indian Institute of Technology Guwahati**

**Lab Sheet-4 Projections of Points, Lines and Traces Wednesday Afternoon**

**Max Marks: 25 × 4 = 100 Date: 04.09.2019**

1. Draw the projections of the following points on the same XY line, keeping the projectors 20 mm apart.

a) L, 25 mm above the HP and 40 mm behind the VP

b) M, 20 mm above the HP and 35 mm in front of VP

c) N, 30mm above the HP and in the VP

d) O, 40 mm below the HP and 25 mm in front of the VP

e) P, 25 mm below the HP and 25 mm behind the VP

f) Q, 30 mm behind the VP and in the HP.

2. A line PQ of 50 mm length makes an angle 30° to the VP while its FV is inclined at 45° to the XY line. The point P is located at 15 mm above the HP and 10 mm in front of the VP. Draw the projection of the line and the true angle made by the line with the HP.

3. A straight line AB of 60 mm long has its one end, A 10 mm above the HP and 20 mm in front of the VP while the end, B is 50 mm in front of the VP and above the HP. The TV of the line measures 45 mm. Draw projection of AB line and find its true inclination with the VP and HP.

4. The FV of CD 45° inclined to XY and its VT and HT are 20 mm and 30mm below XY line respectively. The end C is 10 mm above HP and the other end D is 90 mm in front of the VP. Draw the projection of the line CD and its true length, true inclinations with the HP and VP.