

Year/Semester: I/I

Subject: ENGINEERING DRAWING (EDRG 101)

Time: 1hr 30 min

Full Marks: 20

- Make necessary assumptions whenever required.
- 2 marks separated for the title box and borderline.

Set A

1. A 70 mm long line PQ has its end P 20 mm above the H.P. and 40 mm in front of the V.P. The other end Q is 60 mm above the H.P. and 10 mm in front of the V.P. Draw the projections of PQ and determine its inclinations with the reference planes. [9]

OR

A hexagonal plane of side 30 mm has an edge in the V.P. The surface of the plane is inclined at  $45^\circ$  to the V.P. and the edge on which it rests is inclined at  $30^\circ$  to the H.P. Draw its projections. [9]

2. A hexagonal pyramid of base side 30 mm and axis 60 mm has one of its slant edges on the H.P. and inclined at  $45^\circ$  to the V.P. Draw its projections when the base is visible. [9]

OR

A square hole of side 25 mm is cut in a cylindrical drum of diameter 50 mm and height 70 mm. The faces of the hole are inclined at  $45^\circ$  to the H.P. and axis intersects with that of the drum at right angles. Draw the development of its lateral surface. [9]