

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.ARCH SEMESTER - 1 EXAMINATION WINTER - 2018**

**Subject Code: 2X15002****Date: 01-01-2019****Subject Name: Technical Representation of Drawing (TRD) – I****Time: 10:30 am to 1:30 pm****Total Marks: 40****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** Draw the projection of a hexagonal pyramid, base on H.P and a side of the base parallel to and 25mm in front of V.P. Side of the base is 40mm long and the axis 65mm long. **10**
- OR**
- Q.1** Draw the projection of a cylindrical axis perpendicular to the V.P. and 40mm above the H.P., one end 20mm in front of the V.P. The diameter of the base is 50mm long and the axis 65 mm long. **10**
- Q.2** Draw an equilateral triangle of 75mm side and inscribe a circle in it. Draw the projections of the figure, when its plane is vertical and inclined at 30° to the V.P. and one of the sides of the triangle is inclined at 45° to the H.P. **10**
- OR**
- Draw orthographic projection of a hexagonal plane of side 50mm, which is 15 mm away from V.P., 20mm above H.P. and is inclined at 45° to H.P. It is perpendicular to V.P. **10**
- Q.3** Solve the following by applying the method of projection on auxiliary planes: **(Any one)** **10**
- (a) Inclinations of a line XY with H.P. is 30°. Determine the true length of XY and its inclination with V.P.
- (b) Inclinations of a line AB with V.P. is 30°. Determine the true length of AB and its inclination with H.P.
- Q.4** Draw the projections of a 65mm long straight line parallel to both the H.P. and the V.P. and 25 mm from each. **05**
- Q.5** Explain in brief : **(Any one)** **05**
- (a) Instruments used in architectural drafting
- (b) Methods of Projections

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