

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.ARCH. – SEMESTER– I EXAMINATION – SUMMER 2019

Subject Code:2X15002

Date:30/05/2019

Subject Name: T.R.D.-I

Time:10:30 AM TO 01:30 PM

Total Marks:40

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks:
4. All Questions are compulsory.
5. Use any suitable scale unless mentioned.
6. Draft using appropriate instruments.

- Q.1** Define Orthographic projections. **05**
Differentiate between First angle and Third angle projections.
- Q.2(a) Draw Orthographic Projections of following** **10**
- i) Draw projection (plan and elevation and side elevation) of a hexagonal plane of each side 4cm, kept in such a way that the plane is parallel to H.P. and right angle to V.P.(vertical plane). The plane is kept 3 cm above H.P. and one side of the plane is 5 cm away from the V.P.
 - ii) Draw projection of a circular plane radius 3 cm is perpendicular to V.P. and H.P. both. It is 2 cm away from V.P. and 1 cm above H.P. Draw its plan, Elevation and side elevation.
- Q.2(b) Draw Orthographic Projections of following(Any 2 out of 3)** **15**
- i) A pentagonal pyramid, base 3cm long and axis 7 cm long, has one of its slant edges in the H.P. and inclined at 30 to the V.P. Draw the projections of the solid when the apex is towards the observer
 - ii) Draw projections of Hexagonal prism, base 3 cm side and axis 6 cm long, resting on one of its rectangular faces on the H.P., with axis inclined at 45 to V.P.
 - iii) Draw projections of a cone, base 5 cm diameter and axis 7.5 cm long, lying on a generator on the ground with the top view of the axis making an angle of 45 with V.P.
- Q.3 Draw Orthographic Projections of following(Any 1 out of 2)** **10**
- i) A square prism, base 4 cm side and height 6.5 cm has its axis inclined at 45 to the H.P. and has an edge of its base, on the H.P. and inclined at 30 to the H.P. Draw the projections.
 - ii) A hexagonal prism, base 3 cm side and axis 7.5 cm long has an edge of the base parallel to the H.P. and inclined at 45 to the V.P. Its axis makes an angle of 60 to the H.P. Draw the projections.