

A.D.PATEL INSTITUTE OF TECHNOLOGY
First Year (1st Sem) Internal Exam [GTU] –CP, EC, IT, EE
SUB: Engineering Graphics

Date: 29-09-08

Time: 08.00 am to 9.00.am

Marks: 20

Note: (01) Retain all the construction Lines
 (02) Use both the side of Drawing sheets
 (03) Don't draw border lines and title block

Q-01 Two straight lines OA and OB are at 75° to each other. A point P is at a distance of 20 mm from OA and 30 mm from OB. Draw a hyperbola passing through the point "P". **06**

OR

Q-01 OBA is an offset slider crank chain. Crank OB is 30 mm long and rotates in clockwise direction. Connecting rod AB is 128 mm long. Offset is 40 mm. Draw the loci of two points P and R as shown in fig. no 01 PB=45 mm and BR =30 **06**

Q-02 A circle of 25 mm radius rolls on the circumference of another circle of 150 mm diameter and outside it. Draw the locus of the epicycloid for point P on the circumference of the rolling circle for one complete revolution of it. Draw tangent and normal to the curve at any point on the curve. **06**

OR

Q-02 Draw the following view of the given figure by using first angle projection method (i) Front View (ii) Top View (iii) L.H.S.V **06**

Q-03 A Line AB, 90 mm long, is inclined to H.P. by 30° and inclined to V.P. by 45° . The line is in first quadrant with Point A 15 mm above H.P. and 25 mm in front of V.P. Draw the projection of line AB. **06**

OR

(A) Draw the projections of a circle of 75mm diameter resting on the H.P. on a point A of the circumference. Plane is inclined to the H.P. such that the plan of it is an ellipse of minor axis 30mm. The plan of the diameter, thorough the point A, is making an angle of 30° with the V.P. Measure the angle of the plane with the H.P. **06**

(B) Differentiate between First Angle and Third Angle projection method **02**

