

**Shantilal Shah Engineering College Bhavnagar**

**B.E. Semester: 1<sup>st</sup> /2<sup>nd</sup> (FOR ALL BRANCHES)**

**Remedial P.A.T. (RPAT) SYLLABUS FEB.2021**

**Subject Name: ENGINEERING GRAPHICS & DESIGN (3110013)**

<b>Sr. No.</b>	<b>Topics</b>
1.	<b>Introduction to Engineering Graphics:</b> Drawing instruments and accessories, BIS – SP 46. Use of plane scales, Diagonal Scales and Representative Fraction.
2.	<b>Loci of Points:</b> Path of the points moving on Simple mechanisms, Slider crank mechanism, Four bar mechanism.
3.	<b>Engineering Curves:</b> Classification and application of Engineering Curves, Construction of Conics, Cycloidal Curves, Involutives and Spirals along with normal and tangent to each curve.
4.	<b>Projections of Points and Lines:</b> Introduction to principal planes of projections, Projections of the points located in same quadrant and different quadrants, Projections of line with its inclination to one reference plane and with two reference planes. True length and inclination with the reference planes.
5.	<b>Orthographic Projections:</b> Fundamental of projection along with classification, Projections from the pictorial view of the object on the principal planes for view from front, top and sides using first angle projection method and third angle projection method.

**Subject Coordinator**

**(Prof. U A Patel)**

## **Instructions**

- 1. The test will be conducted on MS Team online platform.  
(Total Marks – 30, Time: 75 Min.)**
- 2. The Test will contain MCQs & Drawing Problems.**
- 3. Use Drawing Sheets and all relevant drafting instruments for solving the Drawing Problems.**
- 4. Upload the Images (.jpg, .jpeg etc.) of Solved Drawing Problems wherever asked.**
- 5. Maintain the Readable Clarity of Images.**
- 6. Mention your Name & Number with each Solved Drawing Problems.**