



STANLEY
COLLEGE OF ENGINEERING & TECHNOLOGY FOR WOMEN
(Approved by AICTE , New Delhi | Affiliated to Osmania University ,Hyderabad)
Address : Chapel Road, Abids ,Hyderabad

CE 102

ENGINEERING GRAPHICS

UNIT-I

Instruments and their use: Lettering and types of lines. Scales reduced & enlarged scales, representative fraction, types of scales -plain, diagonal & vernier.

Geometrical construction: - Construction of regular polygons inscribed in a circle, given the side of the polygon or diameter of a circle.

Curves used in engineering practice: - Conic sections-Ellipse, Parabola & Hyperbola. Cycloid, Epi cycloid, hypocycloid & Involute for one turn.

UNIT-II

Projections of points and straight lines: - Points placed in different quadrants. Projections of straight lines in first angle projection and traces.

Projections of planes: - Perpendicular planes, traces of planes, oblique planes and auxiliary planes.

UNIT - III

Projections of solids: - Polyhedra, solids of revolution, projection of solids in simple positions, axis inclined to one and both the reference planes.

UNIT - IV

Sections of solids: - True shape of section, sections of prisms, pyramids, cylinders and cones.

Development of surfaces: - Development of surface of various solids such as prisms, pyramids, cylinders and cone in simple position.

UNIT - V

Isometric Projections: - Isometric view, Isometric scale, Isometric projections/views of prisms, pyramids, cylinder, cone, sphere and combination of two or three solids.

Orthographic projections: - Conversion of pictorial view (isometric view) to orthographic view in first angle projection.

Suggested Reading :

1. N.D. Bhatt, *Elementary Engineering Drawing*, Charotar Publications, 2004.
2. Basant Agarwal & C.M. Agarwal, *Engineering Drawing*, Tata McGraw Hill Education Pvt. Ltd., 2014
3. K.L. Narayana & P. Kannaiah, *Text Book of Engineering Drawing*, Scitech publications, 2002

Text Books for Reference :

1. K. Venugopal, *Engineering Drawing & Graphics + AutoCAD*, New Age International, 2007.
2. P.S. Gill, *Engineering Drawing*, S.K. Kataria & Sons, 2009.
3. **B.V.R.** Gupta & M. Raja Roy, *Engineering Drawing*, I.K. International Publishing House Pvt. Ltd., 2009.

List of The Faculty:

1. Mr. Eshwar
2. Mr. Rizwan Shariff
3. Mr. venugopal
4. Mr.K.Rajesh
5. Mrs. V.Sneha
6. Mrs.Rabbani kausar