

## TEACHING AND EXAMINATION SCHEME:

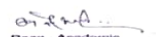
Teaching Scheme			Credits	Marks			Duration of End Semester Examination
L	T	P/D		Sessional	End Semester Exam	Total	
1	0	2	2	60	40	100	2 hrs

## COURSE CONTENTS:

Unit	Contents	No. of hours
<b>I</b>	<b>Basic of Engineering graphics</b> Relevance of Graphics in Industry - BIS conventions and specifications - drawing sheet sizes – Lettering, Notations – Dimensioning - Scales. Line and Types of Lines, drafting method, Introduction to Computer Aided Drafting. Exposure to Solid Modelling software, 3D Drawing, Introduction to Orthographic projections - Naming views as per BIS - First angle projection method. Projection of points and projection of Straight lines. Solid modelling Software commands	<b>4</b>
<b>II</b>	<b>Projection Of Solids</b> Projections of solids. Solids in simple positions and axis inclined to one plane only. Section of solids. Section planes inclined to Horizontal Plane only. True shape of the section. (CAD Drawing)	<b>4</b>
<b>III</b>	<b>Isometric Projection</b> Concepts of isometric projection. Isometric scale, Isometric view of simple solids with sectional planes. (CAD Drawing) Isometric view of solids with multiple sectional planes	<b>4</b>
<b>IV</b>	<b>Development Of Surfaces And Drawing</b> Development of Surfaces of simple solids with simple sectional planes. Parallel line method and Radial line method only. (CAD Drawing) Drawing: PLAN and ELEVATION and Sectional elevation of objects. (CAD Drawing)	<b>4</b>

## Text Books

1. Jeyapoovan, T., Engineering Graphics and Design, Vikas Publishing House Pvt Ltd., New Delhi, 8 th Edition, 2022.
2. P. Kanniah, K. L. Narayana, K. Venkata Reddy, A Textbook on Engineering Drawing, BS Pub, 2016.
3. Alf Yarwood, Introduction to AutoCAD – 2D and 3D Design, Newnes Elsevier, 2011
4. Bhatt N.D and Panchal V.M, Engineering Drawing: Plane and Solid Geometry, Charotar Publishing House, 2019.

  
Dean - Academic  
H P Technical University  
Hampiur - 177 001, HP

5. Kirstie Plantenberg, Engineering Graphics Essentials, SDC Publications., fifth Edition, 2016.

## Reference Books:

1. Shah, M.B. & B.C. Rana, “Engineering Drawing and Computer Graphics”, Pearson Education, 2008.
2. “Engineering Drawing Practice for schools and colleges”, Bureau of Indian Standards, New Delhi