

SUBJECT : ENGINEERING GRAPHICS

CLASS : XI

1. Weightage of Contents (Unit Wise) :

UNIT	TOPIC	MARKS
I	Plane Geometry 1. Lines, angles and rectilinear figures 2. Circles, inscribing and circumscribing of circles	10
II	Solid Geometry 3. Orthographic projection of Points and Lines. 4. Orthographic projection of regular plane figures. 5. Orthographic projection of right regular solids. 6. Section of solids	30
III	Machine Drawing 7. Orthographic projection of simple machine blocks 8. Isometric projection of plane figures (laminae).	30
	Practical	30
	Total Marks	100

MONTH	UNIT/CHAPTER	SUB TOPICS	LEARNING OUTCOMES	ACTIVITY/INNOVATIVE PEDAGOGY/ART INTEGRATION/INTERDISCIPLINARY APPROACH
April	Ch.-1	Lines, Angles, Letters, Dimensioning, & Rectilinear Figures	Students will be able to learn the usage of different lines, angles and ratio to construct rectilinear figures with exact dimensions	Field Layout of various indoor and outdoor games
April	Ch.-2	Circles, Semicircles & Tangents	Students will be able to utilise circles, semi circle and tangent to create circular shapes for machine designing.	Drawing ellipse by Trammel and thread method
April, May, July,	Ch.-3	Orthographic	Students will be able to analyse and	Preparing Top view of a class room,

August, September		Projection(Point, Line, Plane, Solid)	understand how to convert 3D drawing to 2D drawings. This will help in improving their imagination skills.	home : drawing room/bedroom/ study room/ EG room with different objects therein
October	Ch.-4	Section of Solids	Students will be able to visualise the sectional views of machine parts cut in different shapes.	Preparing the section of solids (prisms, pyramids Etc.) with clay, soap, thermocol.
November	Ch.-5	Orthographic Projection of simple Machine Blocks	Students will be able to imagine the formation of different 2D views from the single 3D view	Developing different types of packaging boxes
December, January	Ch.-6	Isometric Projection	Students will be able to analyse and understand how to convert 2D drawing to 3D drawings. This will help in improving their imagination skills.	