

GANPAT UNIVERSITY									
FACULTY OF ENGINEERING AND TECHNOLOGY (DIPLOMA PROGRAMMES)									
Programme		Diploma Engineering				Branch/Spec.		Civil Engineering	
Semester		II				Version		1.0.0.0	
Effective from Academic Year			2018-19			Effective for the batch Admitted in			June 2018
Subject code		1ES203		Subject Name		Building Drawing			
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	2	0	2	0	4	Theory	40	60	100
Hours	2	0	4	0	6	Practical	60	40	100
Pre-requisites:									
Learning Outcome:									
<p>Types of Drawings and its importance, various types of Projections, Use building drawing Symbols, Conventions and Abbreviations. Apply the Bye laws and Principles of Planning for residential and other public buildings. Prepare detail drawings for single and two storied residential building and public building. Generate perspective view of simple building by different methods.</p> <p>Drawing is very important subject especially for civil engineers. At advance stage the skills of producing working drawings are necessary for technicians, this course has been designed in such a way that a technician can produce more detailed Civil Engineering Drawing related to construction of single storied , double storied residential buildings, public buildings and other simple civil engineering structures. provide scope and provisions for building components and Services.</p>									
Theory syllabus									
Unit	Content								Hrs
1	INTRODUCTION <ul style="list-style-type: none"> • Various Types of drawing. • Types of Projections. • Working drawing, large scale drawing, enlarges scale drawing. • Scales for various types of Drawings. • Situation where above drawing are prepared/ required. • Symbols, Conventions and Abbreviations for- Electrical fittings , water supply ,sanitary fittings, material for construction etc. 								04

2	BUILDING BYE-LAWS AND PRINCIPALS OF PLANNING <ul style="list-style-type: none"> • Building bye-laws for residential buildings • Plot area and Built-up area, Size of rooms, Margins, Height Passages, Ventilation , Circulation , Water supply and Sanitary , Electrification , Fire Safety , Lifts. • Principles of Planning for residential & other public buildings in details Such as - Room Dimension, Area, Height, Privacy, Roominess Factor Orientation, Grouping, Drainage, Aspect, Prospect, Economy. • Colour code for alteration and addition in existing building • Approval procedure with respect to bye-laws. 	06
3	PLANNING OF RESIDENTIAL BUILDING <ul style="list-style-type: none"> • Concept plan and drawing of residential single and two storied buildings. • Concept plan of various public buildings. (Such as hospital, school, shopping Centre, office building and industrial unit etc.) • Given situation & Plot area, preparation of detailed drawing of a single storied and double storied residential building with detail of Line plan, Detailed Plan, Ground floor Plan, First floor plan, Elevation and Sections with showing schedules of opening and foundation details. 	08
4	PERSPECTIVE DRAWINGS AND MODELING <ul style="list-style-type: none"> • Introduction of perspective view and other related terms. • Elements of perspective drawing. • Perspective view by two point & three point Methods. • Perspective view for various components and other residential building and non-residential public buildings. • Model preparation of simple buildings 	06
5	CONSTRUCTIONAL DETAILS DRAWING OF BUILDINGS <ul style="list-style-type: none"> • Drawings of parts of building such as staircase, chajjas, projections Columns, piers, slab, footings etc. • Show building services like water supply , sanitary, electrification on line plan 	06

Practical content

Practical hours based on above syllabus includes interpretation of building drawings, Symbols, conventions & abbreviations, Study of building bye laws & NBC , Draw detail plan, elevation & sections of various building structures, Prepare perspective view of a given building & its components, Visit a residential / non-residential bldg. to studies about building services and prepare a model of a building using card board.

Text Books

1 B.H.Shukla , Civil Engineering Drawing , Atul Prakashan, Ahmadabad

Reference Books

1 Gurcharan Singh & Subhash Chander , Civil Engineering Drawing , Standard publishers distributors, Delhi

2 "Civil Engineering Drawing", by S. C. Rangwala, 2nd Edition, Charotar Publication House Ltd.

3 Building Planning & Drawing", by Dr. N. Kumara Swamy, 4th Edition, Charotar, Publication.