

4010 - CIVIL ENGINEERING DRAWING – III									
Teaching Schedule Per Week			Progressive Assessment	Examination Schedule (Marks)					
Lectures	Practical	Credits		Theory		Practical Ex.		Total	
1	4	5	50	4Hrs.	100	50		200	
Pre-requisite		Source	Semester	Theory	Test	Total	TW	PR	Gr Total
4005		CVL		75	25	100	50	25	175

RATIONALE: - The course content is designed to enable the students- To possess knowledge of various agencies in building industry and their functions. To prepare submission drawings for approval including other required documents. To know the building bye laws. To plan various types of buildings following the design and planning principles.

COURSE CONTENTS		Hrs	Mks
1. PLANNING OF BUILDINGS		10	-
Principles of planning residential and public buildings, aspect, prospect, grouping, orientation, privacy, circulation, roominess, sanitation, elegance and economy. Climatic-effects, habits of people and its influence on planning. Effect of furniture and interior requirements. Building by-laws of plan sanctioning authority in respect of- Plot area (size), set backs in front, rear and sides, open spaces, plinth area, coverage, built-up area, floor-area ratio, minimum dimensions of different rooms of a building passage, stair, toilets, parking, doors and windows sizes, minimum ceiling-height, head-room, sill-height, basement-height and mezzanines. Planning of residential buildings with examples. Planning of public buildings. Following bye-laws for minimum number of toilets, urinals, passage widths, stairs etc. with examples. Requirements of different public buildings such as library, community hall, post-office, commercial complexes, school, hotels, hostels, etc.			
2. BUILDING INDUSTRY		3	-
Different agencies such as architects, service consultants (for electric fittings), sanitary, structural designers, contractors, suppliers, specialist in building services and role of each. Special services in building construction such as water proofing, termite proofing, soil stabilising and pile driving agencies. Air conditioning, acoustical treatments, etc.			
3. PLAN SANCTIONING		3	-
Plan sanctioning authorities-Panchayat, Municipality, Town planning, Planning and Development Authority. Procedure for submitting plans for approval to plan, sanctioning authorities, number of copies, enclosures of plans, important documents, scales and other details.			
Total		16	-

DRAWING CLASSES

Planning and designing a residential building from a given data- Framed structure with partly flat and partly pitched roof plans, elevation sections, schedule of doors and windows, construction notes, site plan, area statement. Note: Minimum two sections are to be taken- One section through stair case, another section through bath and w. c.. Drawing the same as above on tracing sheet. Taking blue print of sheet No.2 above. Design and drawing of a public building from a given data, plans, elevations, sections schedule of doors and windows, site plan area statement, construction notes. Preparation of line plans for different public building. Two point perspective of residential building designed in 1 above.

Notes- Drawing shall be per I.S. 962-1967 and dimensions in mm or in meters, areas shall be in sq. metres, Drawings for submission made by consultants, architects may be shown and referred. Students should present to the examiners term work certified by Head of Institution at the time of oral examination, Marks distribution for theory paper shall be as follows:

Planning and drawing of residential building	50 marks
Planning and drawing of public building	30 marks
Theory on principles, bye-laws, etc	20 marks

REFERENCE BOOKS

1. Building drawing by Shah, Kale and Patki
2. Civil Engg. Drawing by Mallik.
3. Building Construction by Rangawala
4. Building Construction by Sushilkumar.
5. I. S. code of practice for Architectural and Building Drawings (I. S. 962)