

RGPV (DIPLOMA WING) BHOPAL			QBE CURRICULUM FOR THE COURSE			FORMAT-3	Sheet No. 1/3
Branch	Civil Engineering/ Construction Technology and Management				Semester	III	
Course Code	304	Paper Code	6903	Course Name	Building Drawing and CAD		
Course Outcome 1	Draw various types of lines, graphical symbols, recognizetypes of plan and appropriate scale used.				Teach Hrs	Marks	
Learning Outcome CO330411	Draw various types of lines, graphical symbols for materials, doors and windows, symbols for water supply, sanitary and electrical installations and write abbreviations as per IS 962.				4	10	
Contents	<p>Conventions as per IS: 962 for materials used in construction.</p> <p>Graphical symbols for doors and windows, symbols for water supply, sanitary, electrical installations and Abbreviations.</p> <p>Types of lines- visible lines, centre line, hidden line, section line.</p>						
Method of Assessment	External – End semester exam.						
Learning Outcome CO330412	Recognize various line types, symbols given in an existing drawing, types of plan and appropriate scale used.				6	10	
Contents	<p>Study of existing building drawings.</p> <p>Selection of scale for various types of plans viz Index Map, Key plan, Site plan, Layout plan etc.</p> <p>Plot area, built up area, super built up area, plinth area, floor area, carpet area, circulation area and Floor Area Ratio.</p>						
Method of Assessment	Internal – Quiz/Assignment.						
Course Outcome 2	Prepare line plans of residential/public buildings applying principles of Planning and bye-laws.				Teach Hrs	Marks	
Learning Outcome CO330421	Explain principles of Planning, space requirement norms and bye-laws.				15	15	
Contents	Principles of planning for Residential and Public building- Aspect, Prospect,Orientation, Grouping, Privacy, Elegance, Flexibility, Circulation, Furniture requirements, Sanitation, Economy.						

	Space requirement and norms for minimum dimension of different units in the residential and public buildings. Rules and bye-laws of sanctioning authorities for construction work.		
Method of Assessment	External – End semester exam.		
Learning Outcome CO330422	Draw line plan of given residential Building, planning of staircase.	10	10
Contents	Method of preparing line plan of a residential building to suitable scale with staircase, WC and Bathroom applying principles of planning. Basics of planning of staircase, Rise and Tread for residential and public building.		
Method of Assessment	Internal – Mid semester exam.		
Learning Outcome CO330423	Draw line plan of given public building.	10	10
Contents	Method of preparing line plan of public building-school building/primary health centre/restaurant/bank/post office/hostel/Function Hall and Library applying principles of planning.		
Method of Assessment	External – End semester exam.		
Course Outcome 3	Prepare submission and working drawing of given building.	Teach Hrs	Marks
Learning Outcome CO330431	Recognize development of plan, elevation, section from line plan of a residential building.	20	25
Contents	Method of development of plan, elevation, section passing through staircase or WC and bath from line plan of a single story load bearing type residential building and two storied framed structure type residential building.		
Method of Assessment	External – End semester exam.		
Learning Outcome CO330432	Draw submission drawing of single story load bearing type residential building and two storied framed structure type residential building.	10	10

Contents	Submission drawing - Plan, elevation, section passing through staircase or WC and bath, schedule of openings, area statement, site plan, construction notes with specifications.		
Method of Assessment	External – End semester exam.		
Learning Outcome CO330433	Draw working drawing of above single story load bearing type residential building and two storied Framed structure type residential building.	15	
Contents	Working drawing - Plan, elevation, section passing through staircase or WC and bath. Foundation plan, Details of RCC footing, Column, Beam, Chajjas, Lintel, Staircase and slab.		
Method of Assessment	Practical – Drawing work using drawing instruments.		
Course Outcome 4	Prepare submission and working drawing of given building using CADD.	Teach Hrs	Marks
Learning Outcome CO330441	Recognize various CAD software and use CAD commands.	15	10
Contents	Various CAD software available in the market: AutoCAD, Felix Cad, Auto Civil, 3D Max etc. Starting up of CAD, CAD Window, Tool bar, Drop down menu, command window, Saving of drawing. Introduction of graphic screen, WCS icon, UCS icon, co-ordinates, drawing limits, grid, snap, ortho features. Drawing commands, line, circle, polyline, multiline, ellipse, polygon etc. Editing commands - Copy, move, offset, fillet, chamfer, trim, lengthen, mirror, rotate, array etc. Working with hatches, fills, dimensioning, text etc. working with layers,		
Method of Assessment	Internal – Mid semester exam.		
Learning Outcome CO330442	Draw and print submission drawing of single story load bearing type residential building and two storied framed structure type residential building.	15	
Contents	Using CAD commands draw and print submission drawing of single story load bearing type residential building and two storied framed structure type residential building.		
Method of Assessment	Practical – Drawing work using CAD software.		

Learning Outcome (0330443)	Draw and print working drawing of above single story load bearing type residential building and two storied Framed structure type residential building.	15	
Contents	Using CAD commands draw and print working drawing of single story load bearing type residential building and two storied framed structure type residential building.		
Method of Assessment	Practical – Drawing work using CAD software.		