



GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Of Vocation (D.Voc), 3rd Semester

Branch: Architectural Assistantship

Subject Name: Construction Technology – III

Subject Code: 1230601

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	P	OJT	C	Theory		Tutorial / Practical		
				ESE (E)	PA(M)	ESE (V)	PA (I)	
3	-	-	3	50	-	-	-	50

L-Lecture; P-Practical; OJT – On Job Training; C – Credit; ESE – End Semester Examination; PA – Progressive Assessment

SEMESTER III		
Focus: To acquaint the students with construction practices pertaining to RCC & steel elements, construction practices pertaining to RCC floors, roofs and flooring with different materials and plastering.		
SR NO	Contents:	HR
1	<ul style="list-style-type: none"> Study of steel foundations and columns, types of foundations – isolated, combined, Raft, Base slab, Grillage, pile foundations. 	15
2	<ul style="list-style-type: none"> Study of principles and methods of construction of RCC, one-way, two-way slabs – cantilever slabs, sloping RCC roof, retaining walls, vaults, domes. Hollow clay blocks roofing techniques (filler slab) Shoring & underpinning, form-work techniques, and reinforcement details for RCC Construction. 	15
3	<ul style="list-style-type: none"> Expansion joints – Necessity, location and detailing 	5
4	<ul style="list-style-type: none"> Insulation materials – Thermal and sound insulation materials: mineral wool, unbounded rock and slag wool, polyurethane forms (PUF) etc. 	7
	Total	42
Projects: Site visits, model making, experiment on field for small scale, report writing and documenting detailing and drawings.		
Course Outcome: Develop an understanding of several stages of construction and its sequence of work, understanding of work progress on site. Understanding the role of building materials and its behavior's.		
Method: Lectures, seminars, case study, site visits, etc.		



GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Of Vocation (D.Voc), 3rd Semester

Branch: Architectural Assistantship

Subject Name: Construction Technology – III

Subject Code: 1230601

References:

- Barry R.- Construction of Building
- Khanna P.N.- Civil Engineers Handbook
- Kumar Sushil-Building Construction
- Mackay W. B.- Building Construction
- Mitchell and J.-Building Construction
- Rangwala- Building Construction

Suggested Specification table with Marks (Theory):

Distribution of Theory Marks				
R Level	U Level	A Level	N Level	E Level
5	20	15	5	5

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate and above levels (Bloom's Taxonomy)