



Semester - 6

						Continuous Evaluation Marks					End Semester Exam Marks		End Semester Exam Passing Marks		Total Marks
Code	Subject	Credit	Lect	S	Field Work	I	J	Sub	Total	Passing	T/D	V/P	T/D	V/P	
01101351	Working Drawings	10	2	6	2	20	-	30	50	25	-	50	-	25	100
01101352	Estimate,Coasting and Specifications-II	5	2	2	1	20	-	30	50	25	50	-	25	-	100
01101353	Building Services &Equipments-II	3	1	2	-	20	-	30	50	25	50	-	25	-	100
01101354	Building Regulations	2	1	-	1	20	-	30	50	25	50	-	25	-	100
01101355	Architecture Portfolio & Presentation	3	1	2	-	-	-	50	50	25	-	50	-	25	100
01101356	Structural Design & Analysis-IV	5	2	2	1	20	-	30	50	25	50	-	25	-	100
01101357	Related Study Programs-VI	2	-	-	2	-	40	60	100	50	-	-	-	-	100
	Total	30	9	14	7				400	200			100	50	700

Lect- Lectures, **Field Work** - Field Work, **S** - Studio, **I** - Internal, **J** - Jury, **Sub** - Submission, **T/D** - Theory, **V/P** - Practical
Theory Passing % :50 Practical Passing % : 50

PARUL UNIVERSITY - FACULTY OF ARCHITECTURE

Department of Architecture

SYLLABUS FOR 6th Sem B.Arch PROGRAMME

Working Drawings (01101351)

Type of Course : B.Arch

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme (Hrs./Week)			Credit	Examination Scheme					Total
L	T	P		External		Internal			
				Theory	Practical	Theory	*C.E.	Practical	
2	2	6	10	-	50	20	30	-	100

L-Lectures; T-Tutorial; P-Practical; C.E.-Continuous Evaluation

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	<p>: To familiarize the students with the drawings which are prepared for the actual construction / execution of a building:</p> <ul style="list-style-type: none"> • Execution drawing systems and methods. (for small scale Building) • Trade literature, detailing methods, architectural working drawing. • Choice of materials, fixtures, fittings, availability and constructional feasibility. • Integration of building systems and services. • Detailed drawings to include all components of building like doors, windows, lifts, staircases elevators etc. 	%	

***Continuous Evaluation:**

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.

Reference Books:

1. Architectural Working Drawings (Text Book)
Ralph W. Liebing; Wiley
2. The Professional Practice of Architectural Working Drawings (Text Book)
Osamu A Wakita, M. Linde and Nagy R. Bakhoun; Wiley
3. Working Drawing Handbook (Text Book) Keith
Styles and Andrew Bichard; Routledge

PARUL UNIVERSITY - FACULTY OF ARCHITECTURE

Department of Architecture SYLLABUS FOR 6th Sem B.Arch PROGRAMME

Estimate, Costing and Specifications-II (01101352)

Type of Course : B.Arch

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme (Hrs./Week)			Credit	Examination Scheme					Total
L	T	P		External		Internal			
				Theory	Practical	Theory	*C.E.	Practical	
2	1	2	5	50	-	20	30	-	100

L-Lectures; T-Tutorial; P-Practical; C.E.-Continuous Evaluation

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	<p>Understanding Quantity Surveying & Estimate preparation:</p> <ul style="list-style-type: none"> • Specification: Specification of different building items - general specification and detailed specification. • Rate Analysis: Meaning, Importance, Purpose and use, factors affecting rate analysis. Rate analysis of major items of building work. Factors affecting, cost of work, task work general information regarding S.O.R. • Estimates: Method of computing quantities, mode of measurement of all items of work, unit of measurement IS 1200. • Estimates of different items of work:- <ul style="list-style-type: none"> ○ Compound wall, Small residential building 1 room with verandah, Small residential building with 2 room ○ kitchen with Bath W.C., Two storied residential building, R.C.C. work column, flooring, Beam - T Beam, ○ Slab - One way/Two way. Slab including centering, shuttering & reinforcement. Steel truss. ○ Material requirement for above items including Brick work ± R.C.C. - ○ Wooden items - doors, windows, Glass. ○ Measurement Book its entry checking and preparation of Bill etc. standard M.B. • Over and above the mentioned items, Estimate of Septic Tank, Soak Pit, Sanitary item ± Plumbing, Electrification. • Rate analysis of all major items to be prepared. 	%	

***Continuous Evaluation:**

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.

Reference Books:

1. Estimation and Costing (Text Book)
M. Chakraborti; M. Chakraborti
2. Estimation and Costing (Text Book)
B. N Dutta; UBS Publishers Distributors Pvt. Ltd.
3. Practical Information for Quantity Surveyors (Text Book) P.T
Joglekar; Pune Vidyarthi Griha Prakashan

PARUL UNIVERSITY - FACULTY OF ARCHITECTURE

Department of Architecture

SYLLABUS FOR 6th Sem B.Arch PROGRAMME

Building Services & Equipments-II (01101353)

Type of Course : B.Arch

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme (Hrs./Week)			Credit	Examination Scheme					Total
L	T	P		External		Internal			
				Theory	Practical	Theory	*C.E.	Practical	
1	-	2	3	50	-	20	30	-	100

L-Lectures; T-Tutorial; P-Practical; C.E.-Continuous Evaluation

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	<p>study advanced Services in Buildings (Electrification, Communication Systems, Air conditioning):</p> <ul style="list-style-type: none"> Electrical services - Transformers, sub-stations, LT rooms, Power Connection, A.C & D.C, conduits, distribution board and fuses, wiring system (concealed & open) fixtures, design of layout and symbols for representation. Communication systems (telephone, fax, EPABX etc.) and their layouts and connections. Air conditioning and mechanical ventilation, importance of Air - conditioning, Types of Air conditioners, components of an Air conditioning system, ducting, layout and design drawings. 	%	

***Continuous Evaluation:**

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.

Reference Books:

1. Building Construction Illustrated (Text Book)
Francis D.K Ching; Wiley (John Wiley & Sons, Inc.)
2. Fundamentals of Building Construction: Materials and Methods
(TextBook) Edward Allen and Joseph Iano; Wiley (John Wiley & Sons, Inc.)

PARUL UNIVERSITY - FACULTY OF ARCHITECTURE

Department of Architecture

SYLLABUS FOR 6th Sem B.Arch PROGRAMME

Building Regulations (01101354)

Type of Course : B.Arch

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme (Hrs./Week)			Credit	Examination Scheme					Total
L	T	P		External		Internal			
				Theory	Practical	Theory	*C.E.	Practical	
1	1	-	2	50	-	20	30	-	100

L-Lectures; T-Tutorial; P-Practical; C.E.-Continuous Evaluation

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	<p>regulations for development control and quality as a means of ensuring minimum standards of building performance and environmental quality.:</p> <ul style="list-style-type: none">• Need and rationale for development and building control, prevailing legislation (various Acts) under which Rules and Regulations have been worked out, National Building Code.• Definitions and explanation of various terms like Act, Rules, Regulation, Development Plan, Planning Authority, Local Authority, Built-up Area, Building Unit, FSI / FAR, Plot coverage, Margins, setbacks, Development permissions, occupancy certificate etc.• General development requirements and regulations in Gamtal and Revenue Survey areas, for Industrial Areas, Low cost Housing and other special structures.• Procedure for securing Development permission and documents required.	%	

***Continuous Evaluation:**

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.

Reference Books:

1. Gujarat Town Planning and Urban Development Act 1976 (TextBook)
; Government of Gujarat
2. General Development Control Regulations (TextBook)
; AUDA
3. National Building Code of India (TextBook)
; Government of India

Architecture Portfolio & Pre sentation (01101355)

Type of Course :B.Arch

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme (Hrs./Week)			Credit	Examination Scheme					Total
L	T	P		External		Internal			
				Theory	Practical	Theory	*C.E.	Practical	
1	-	2	3	-	50	-	50	-	100

L-Lectures;T-Tutorial;P-Practical; C.E.-Continuous Evaluation

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	Learn the techniques of presenting academic projects and other work in the form of a portfolio.: <ul style="list-style-type: none">To learn techniques of preparing a portfolio by compiling various forms of project data such as drawings, images, models, 3Ds, sketches, briefs, etc. from various sources and combining the same into a common format file.Enhancing the visual appearance of the compiled data by suitable composition and presentation tools; and preparing various versions of the portfolio for Online display/ Hard copy printing/ E- mail version/ Editable soft copy, etc.	%	

***Continuous Evaluation:**

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.

Reference Books:

- How to create a portfolio and get hired(TextBook) Fig Taylor; Lawrence King Publishing
- The Architect Portfolio: Planning ,Design, Production (TextBook)Andreas Luescher; Routledge

Structural Design & Analysis-IV (01101356)

Type of Course :B.Arch

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme (Hrs./Week)			Credit	Examination Scheme					Total
L	T	P		External		Internal			
				Theory	Practical	Theory	*C.E.	Practical	
2	1	2	5	50	-	20	30	-	100

L-Lectures;T-Tutorial;P-Practical; C.E.-Continuous Evaluation

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	To study the designing of concrete structure.: <ul style="list-style-type: none">• Study of cement and concrete as a structural material.• Definition of Permissible stresses, balanced section, under reinforced and over-reinforced section.• Design methods of R.C.C. structures:working stress method and limit state method.• Application of relevant IS codes.• Design of simply supported one way slab, two way slab & continuous slabs.• Design of singly reinforced and doubly reinforced beams ELL beams T-beams.• Design of shear reinforcements.• Axially and eccentrically loaded columns, types of columns.• Design of axially loaded columns & reinforcement detailing.• Design of isolated footing (square & rectangular).• Conc ept of Hinge in RCC members.	%	

*Continuous Evaluation:

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.

Reference Books:

1. Design of R.C.C.Structures(TextBook) N. Subramanian; Ox ford
2. Plain and Reinforced ConcreteVol-1(TextBook) Jay Krishna; Nem Chand
3. ISCode±456-2000, Code Of Practice For Plain&Reinforce Conc rete(TextBook) BIS; New Delhi
4. ISCode-875±1987, Code Of Practice For Design Loads(TextBook) BIS; New Delhi
5. S.P.±16Design Aids to IS456(TextBook) BIS; New Delhi

Related Study Programs-VI (01101357)

Type of Course :B.Arch

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme (Hrs./Week)			Credit	Examination Scheme					Total
L	T	P		External		Internal			
				Theory	Practical	Theory	*C.E.	Practical	
-	2	-	2	-	-	-	60	40	100

L-Lectures;T-Tutorial;P-Practical; C.E.-Continuous Evaluation

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	The aspects of execution and construction of a building.: Study of various concerns related to the execution of a building construction process at various stages/ junctions/ locations; in case of different materials and respective construction techniques; through site studies of various construction sites.	%	

***Continuous Evaluation:**

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.