

**SYLLABUS**  
**DEGREE OF BACHELOR OF ARCHITECTURE**  
**UNIVERSITY OF MUMBAI**  
**FIFTH YEAR ARCHITECTURE – PART 1**

**5.1 DESIGN DISSERTATION**

**Teaching Hours**

<b>Lecture</b>	<b>: -----</b>
<b>Studio</b>	<b>: 192 periods of 45 mins. Each. ( 144 Hours )</b>

**Sessional Marks**

<b>Internal</b>	<b>: 300</b>
<b>External</b>	<b>: 600</b>

**Examination Scheme**

<b>Duration</b>	<b>: ----- Note : Syllabus as prescribed</b>
<b>Marks Max.</b>	<b>: ----- at the 4<sup>th</sup> Year Architecture to</b>
<b>Marks Min.</b>	<b>: ----- be continued in the First Term of 5<sup>th</sup> Year</b>

Scope for design consideration :

Design dissertation on a topic ( project ) approved by the college separately for each student and each student shall carry out dissertation considering the following aspect :

Method of construction, advance technology (concrete and steel), advances building services, climatology, theory of structures studied up to 4<sup>th</sup> and 1<sup>st</sup> term of 5<sup>th</sup> year

Research analysis and data collection

Site selection and justification

User requirements and justification

Climatic conditions

Socio-economic problems

Communication

Transportation

Landscape and town / urban planning

Each student's work shall include intensive dissertation on the above points and shall include briefs on selection of site, methodology of dissertation, designing of the selected project and proper presentation of the drawings as volume i and the detail of the site, its analysis and justification, case studies and analysis, data, brief on structural system and services selected for the project, programme for the selected project, etc as volume ii

Design dissertation work as per volume I and volume II above prepared by the student during 2<sup>nd</sup> term of the 4<sup>th</sup> year and 1<sup>st</sup> term of the 5<sup>th</sup> year shall be examined by an external jury appointed by university of Mumbai.

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**5.2 PROFESSIONAL PRACTICE – II**

**Teaching Hours**

<b>Lecture</b>	<b>: 64 periods of 45 mins. Each ( 48 Hours )</b>
<b>Studio</b>	<b>: -----</b>

**Sessional Marks**

<b>Internal</b>	<b>: 50 100</b>
<b>External</b>	<b>: -----</b>

**Examination Scheme**

<b>Duration</b>	<b>: 3 Hours</b>
<b>Marks Max.</b>	<b>: 100</b>
<b>Marks Min.</b>	<b>: 50</b>

Instructions in the following should be such as to understand the purpose and implication of its application, instructions to the students should be general without going to much in detail in legal aspects.

- Acquisition.
- General principals of land acquisition with reference to norms of compensation.

Purpose of acquisition.

- Elements of valuation – market value methods of valuation specially income capitalisation technique and physical method of valuation.
- Elementary example including one for ownership flats and premises. Building up or determining rate of capitalisation based on gilt - edged theory and general investment market theory.

Valuer and his function including registration.

Meaning of immovable property – ownership and possession.

Joint tenancy and tenancy in common.

Different types of tenures of land – as commonly found leasehold and freehold and lease and other rents.

Rent – different types of rent – standard rent, example on working out of standard rent.

Rateable value and its relation to rent – nature and purpose of rateable value.

Definition of property – ownership – possession – joint tenancies and tenancy in common - types of tenure with special reference to freehold and leasehold tenure.

Principal types of landed properties – their outgoings calculation of rented value and not income market value.

Principals governing the rate of interest required for different types and class of properties – gilt edge securities.

Application of the above principal to elementary example of valuation of properties with freehold and leasehold tenure.

Valuation : Ownership basis flats.

Use in practice ( construction is not contemplated ).

Gross annual value rateable value and their application.

Note on sessional work to be done - Each students is required to submit his report, observations and procedure in regular journals on the following topics –

Report on ancient lights.

Report on dilapidation's and repairs.

Valuation report of a property be done,

Report on acquisition of property.

Easement of light, Ventilation and Access.

All Acts Related to Non Agricultural Lands in relation to building Activities related to regions such as M. R. T. P., M. H. AD. A., & M. M. R. D. A. Acts.

Note : Topics marked by asterisk (\*) shall be dealt with by the Teacher in general but sufficient to impart knowledge on its use and application without going into detail in its legal aspect.

Submission of the Sessional work to internal jury on any of the following topics including those listed in Professional Practice II.

Dilapidation.

Procedure for preparing report and schedule of dilapidation's.

Settlement of claim.

Law relating to structural and general repairs.

Fire Insurance.

Insurance policy and cover note.

Duties of Architect with respect to insurance policy for contract work.

Fire loss assessment claim and report.

Insurable value of the Property.

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**5.3 ADVANCED BUILDING CONSTRUCTION**

**Teaching Hours**

<b>Lecture</b>	<b>: 32 periods of 45 mins. Each ( 24 Hours )</b>
<b>Studio</b>	<b>: 64 periods of 45 mins. Each ( 48 Hours )</b>

**Sessional Marks**

<b>Internal</b>	<b>: 150</b>
<b>External</b>	<b>: 150</b>

**Examination Scheme**

<b>Duration</b>	<b>: -----</b>
<b>Marks Max.</b>	<b>: -----</b>
<b>Marks Min.</b>	<b>: -----</b>

**FIRST TERM**

**Communication Systems** – Lifts of various types such as passenger, goods, hospital etc.  
( with special reference to Design of lift cage ) Escalators.

**Arches and Portals** – Arches and Portals in R. C. C. Steel and Laminated timber construction.

**Domes Shells and Folded Plates** - Folded Plates and barrel shells hyperbolic paraboloids, And domes in R. C. C., Geodesic domes and space frames.

**Prestressed Concrete** - Precast prestressed construction for large span structures (general principal application only ).

Prefabricated Housing construction – Methods of prefabrication of components of a Building and their assembly, aspect of economy involved in larger repetitive work such as community housing etc.

Sessional work based upon above topics. Constructional details and concise report on method of construction and materials selected for Design project for 4<sup>th</sup> year.

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**5.4 WORKING DRAWING**

**Teaching Hours**

<b>Lecture</b>	<b>: -----</b>
<b>Studio</b>	<b>: 64 periods of 45 mins. Each ( 48 Hours )</b>

**Sessional Marks**

<b>Internal</b>	<b>: 100</b>
<b>External</b>	<b>: ----</b>

**Examination Scheme**

<b>Duration</b>	<b>: -----</b>
<b>Marks Max.</b>	<b>: -----</b>
<b>Marks Min.</b>	<b>: -----</b>

Working Drawing of Frame Structure for Design problem done during 4<sup>th</sup> year Architecture, indicating to appropriate scale :

- 1) Foundation Plan.
- 2) Floor Plans.
- 3) Elevation and Sections as necessary.
- 4) 3 working details of interesting part of building.

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# SYLLABUS

## DEGREE OF BACHELOR OF ARCHITECTURE

### UNIVERSITY OF MUMBAI

#### FIFTH YEAR ARCHITECTURE – PART – II ( SECOND TERM )

##### 5.5 PROFESSIONAL TRAINING

##### 16 WEEKS TRAINING PERIOD

##### Sessional Marks

**Internal** : -----  
**External** : 200

##### Examination Scheme

**Duration** : -----  
**Marks Max.** : -----  
**Marks Min.** : -----

##### Professional Experience

During the Second Term the students have to undergo practical training out-side the institute, in such officers / organizations as will give him the necessary opportunity to improve and consolidate his Architectural knowledge.

During his practical training he is expected to work in accordance with the discipline of the organization and will make progress which will be carefully watched by the institution and the student will have to satisfy his employer as well as the institution. The student will give a report of his experience giving the type of experience he has gained.

Logbooks will have to be maintained by the students and counter-signed by the Principal of the firm as also the year master who will also co-ordinate training in the office as also educational objectives.

Proforma for professional experience –

Name of the student (Academic year)

Surname / Father's Name / Student's First Name  
(Name of office / Organisation with address)

- (i) Date of joining
- (ii) Date of leaving

Employer's report : Brief details of the experience gained by the student stating the nature of work done.

Employer's opinion about students training any suggestion.

Signature  
Professor in- charge

Signature  
The Employer

Vive Voce shall be taken at the end of the training period by the University. The students are required to present long book, The examiners at Viva Voce shall examine the students on the topics of Part I and Part II of Professional Practice and the Professional Training.

Application of the above principal to elementary example of valuation of properties with freehold and leasehold tenure.

Valuation : Ownership basis flats.

Use in practice (Construction is not contemplated).

Gross annual value rateable value and their application.

Note on Sessional work to be done – Each student is required to submit his report,

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