



WES
SMT. MANORAMABAI MUNDLE
COLLEGE OF ARCHITECTURE

ARCHITECTURAL DESIGN VI

STRUCTURAL DESIGN AND SYSTEMS VII

BUILDING SERVICES-IV

ACOUSTICS & ILLUMINATION

RESEARCH SKILLS & PROJECT INTRODUCTION

ELECTIVE A- ADVANCED SPATIAL ANALYSIS

CONSTRUCTION TECHNOLOGY & MATERIALS VII

ELECTIVE B - VALUATION

ELECTIVE B - URBAN PLANNING

SEVENTH
SEMESTER

ACADEMIC BOOKLET

2019 – 2020

INDEX -

1. Introduction	1
2. Code of Conduct	1
3. Scheme of Marks	3
4. Teaching Plans	4
5. Submission Schedule	22

YEAR INCHARGE

Prof. Poornima Deshpande

CLASS CO-ORDINATORS

Section A: Prof. Priyanka Sambare

Section B: Prof. Nidhi Gandhi

Section C: Prof. Poornima Deshpande

SMMCA:Vision

Our vision is to reach global standards by deliberate modernization without losing the essential characteristics of our tradition. Being a women's college we find it more pertinent to imbibe both these qualities very consciously in our girl students.

We wish to produce socially responsible architects with sensitivity towards social issues of immediate contexts, national concerns and global effects and positive and creative approach towards life.

Mission

To create an educational environment in which students are prepared to meet the challenges of a fast developing and changing world.

Hence the students are equipped with:

- Up to date knowledge
- Analytical and practical skills
- Creative approach towards everything that they undertake
- Attitude to be sensitive towards national, social and environmental issues

While addressing the global challenges we believe strongly in anchoring ourselves to the immediate context. We accept gratefully our role in preserving and enhancing Vidarbha and Nagpur- the place, its people and architecture.

Core Values

- Integrity
- Creativity
- Innovation
- Discovery
- Collaboration
- Respect
- Discipline
- Excellence
- Diversity

Objectives

- To develop among students academic and Professional competency.
- To foster value-based, creative and critical learning
- To hone skills of living in a technological, globalized and ecologically aware environment
- To develop culture of commitment to excellence

Code of Conduct

Punctuality- It is mandatory for students to be punctual in the college and shall have to be present every day at 8.45 a.m. Every student is expected to attend the morning assembly. Attendance of the students will be taken at the time of assembly by respective class coordinators.

The attendance will also be taken at the beginning of the classes in the afternoon after lunch break. The record of attendance shall be displayed at the end of each month for students. Every student is expected to go through the displayed attendance and request rectification of the record within 8 days by talking to the class teacher if her attendance has been wrongly recorded.

In case of absentism, student shall bring a letter of absence duly signed by her parents/guardian. However, a student having less than 75% attendance will face disciplinary action and will not be permitted to appear for University Examination.

Dress Code – Salwar suit/ Jeans /Leggings with long Kurti.

Extracurricular activities- Credits are allotted to each activity and students are required to attend the activities to earn these credits.

Every student has to attend the programmes organized by the college from time to time.

Attendance for programme of 26th January and of 15th August is mandatory for every student and the dress code a white Salwar Suits/Leggings with Long Kurti.

Study tours- Every year study tours are arranged for students of different years as per their curriculum requirements. Active participation in Study Tour is necessary.

Academic Performance

Submission schedule of all the subjects of a semester will be displayed at the beginning of the session. Students must follow the submission schedules given by respective subject teachers. No late submissions will be accepted after the scheduled date.

Midterm assessment

A midterm assessment will be conducted to assess the progress of a student. It is mandatory for all the students to appear for this assessment.

Student Council

The Student Council will be formulated for the main purpose of empowering the students. Having a formal setup of a Student Council enables students to organize and conduct certain activities, co-ordinate publications like 'Her Space', and properly convey any concerns students may have to the college administration and teaching faculty.

The student council also takes the lead in organizing and coordinating many events in the academic year – like daily assembly, Republic day and Independence day celebrations, NASA, Teachers Day, Archiventure, Women's day celebration and all other major events conducted by the college. The structure of the council is such that students from all years find representation in it. The team is headed by fourth year students with representative from first, second and third year. Third year students take over the reins when fourth year students go for their training in the 8th semester. Final year students act as mentors to the council.

The organization set up for student council will comprise of –

President

Vice-president

Secretary

Vice-secretary

Treasurer

In addition, there are Class Representatives from first and second year – one representative from each of the three sections in a year.

Scheme of Examination

Fourth Year B. Arch Semester 7

Sr. no	Sub Name	Load Per Week					Credits					Paper/Sessional	Duration in Hours	Max. Marks	Total Marks	Min. Pass
		L	T	D	S/P	Total	L	T	D	S/P	Total					
1	Architectural Design VI	2	0	0	10	12	2	0	0	10	12	Sessional Viva-Voce	12	150 50	150 50	100
2	Construction Technology and Materials VII	1	0	2	0	3	1	0	2	0	3	Sessional Paper	3	100 100	100 100	50 40
3	Building Services - IV	1	1	0	0	2	1	1	0	0	2	Sessional Paper	3	30 70	30 70	40
4	Structural Design and Systems - VII	1	1	0	0	2	1	1	0	0	2	Sessional Paper	3	30 70	30 70	40
5	Research Skills and Project Introduction	1	0	2	0	3	1	0	2	0	3	Sessional Viva-Voce	3	50 50	50 50	50
6	Acoustics and Illumination	1	0	0	1	2	1	0	0	1	2	Sessional Paper	3	30 70	30 70	40
7	Elective A	1	0	2	0	3	1	0	2	0	3	Sessional	3	100	100	50
8	Elective B	1	0	2	0	3	1	0	2	0	3	Sessional	3	100	100	50

Total Papers – 4, Sessional – 5, Viva-Voce – 2 (Passing Heads – 11)

Elective A – Architectural Education/Design Process/Interior Design/Landscape Design/Advanced Spatial Analysis

Elective B – Urban Planning/Conservation/ Urban Aesthetics/ Infrastructure Planning/ Valuation.

TEACHING PLANS

DESIGN – VII SEM 2018

Design Co-ordinator - Ar. Poornima Deshpande

Teachers In charge –

Section A - Ar. Aakansha Agarwala, Ar. Rashmi Tijare, Ar. Priyanka Sambare

Section B - Prof. Vijay Munshi, Ar. Namrata Tharwani, Ar. Nidhi Gandhi

Section C- Prof. Anuradha Tikkas, Ar. Poornima Deshpande

Project I (Major Project) - Celebration Consortium

Site Area – 7-8 acres

Built up area – 8000-9000 sq.m

DURATION: 8-10 WEEKS

MARKS: 75%

Introduction -

People of our time are losing the power of celebration. Instead of celebrating we seek to be amused or entertained. Celebration is an active state, an act of expressing reverence or appreciation. To be entertained is a passive state--it is to receive pleasure afforded by an amusing act or a spectacle.... Celebration is a confrontation, giving attention to the transcendent meaning of one's actions.(Source: The Wisdom of Heschel)

Celebration is a form of activity that holds the attention and interest of an audience, or gives pleasure and delight. Although people's attention is held by different things, because individuals have different preferences in entertainment, most forms are recognisable and familiar. Storytelling, music, drama, dance, and different kinds of performance exist in all cultures, were supported in royal courts, developed into sophisticated forms and over time became available to all citizens. The process has been accelerated in modern times by provision of well equipped halls and spaces that rejuvenate any state of mind, situation or any location.

The process of celebration evolves and can be adapted to suit any scale, ranging from an individual who chooses a private party to a banquet adapted for two; to any size or type of party, with appropriate music and dance; to performances intended for thousands; and even for a global audience.

There may be various forms of ceremony, celebration, religious festival, or satire for example. Hence, there is the possibility that what appears as celebration may also be a means of achieving insight or intellectual growth. Events are held in different locations every year, bringing architects, engineers, planners and developers together to showcase their work, discuss future projects, debate current issues and plan new business ventures.

Architecture is incredibly important and architects have the potential to shape all of our lives through their hard work. In addition, architecture plays an essential role in planning for the future and tackling a number of social problems. Architecture is both the process and the product of planning, designing, and constructing buildings or any other structures. Architectural works, in the material form of buildings, are often perceived as cultural symbols and as works of art. Historical civilizations are often identified with their surviving architectural achievements.

Aim -

Thus the aim is to produce a space where all aspects of cultural, social and economic profiles meet and converse with each other and help achieve an integral language and vocabulary will be a mammoth task to be achieved by an Architect.

Learning Objective -

Sustainability is a word much used with respect to design of buildings. But how much are we sustainable really? In this problem , we will attempt to introduce the students to IGBC norms (The Indian Green Building Council) and to apply these in our design.

Sr. no	Stages	Description	Inputs	Expected Output	Duration	Day
1	Stage I	Introduction to Design	Introduction to the concept of Celebration Consortium		1st July 2019	Second Half
2	Stage II	1. Study of existing places of celebration in and around Nagpur 2. Need of said spaces 3. existing trends 4. Survey of needs, aspirations of locals.	Study of congregation spaces in Nagpur. Showing students examples of Precedent study analysis done by past our students.	Submission in the form of Sheets	3rd & 5th July 2019	Second Half
3		REVIEW - I			8th July 2019	Second Half

4	Stage III	Formulating design programs and introduction to the site	Students will be briefed about the 2 selected sites. They will have to select any one site after careful analysis. Design program will be formulated after drawing inferences from the precedent study and requirement and context of the site.	In the form of Sheets. Site model is expected from the students.	9th,10th, 12th, 15th July 2019	Second Half
	Stage IV	Presentation on IGBC rules and Sustainability		Presentation	16th July 2019	Second Half
5	Stage V	Site Analysis, Final model and Final Design Program	Analysis of the site and finalising areas in the design program.	In the form of sheets and site model.	17th, 19th, 22nd, 23rd July 2019	Second Half
6		REVIEW -II			24th July	Second Half
7		IIA Trophy	Brief to be given by IIA	In the form of Sheets	26th July - 10th August 2019	Full Day
8	Stage VI	Concept Development	Identify spatial qualities to be adopted in the form of a creative exercise. Presentation will be given by faculty about the different rating systems for sustainable design	Sheets of programme, Concept with quality and quantity of spaces , site model	13th, 14th, Aug 2019	Second Half
9		REVIEW - III			23rd Aug 2019	Second Half

10	Stage VII	Spatial Combinations and compositions for Site Planning.	Students will play with different spatial combinations with the help of 3D compositions on the physical site model.	In the form of views and site sections.	16th, 19th, 20th, 21st Aug 2019 Sep 2019	Second Half
11	Stage VIII	Final plans, sections & elevations, 3D views simultaneously.	Discussions, teacher-student interactions	Constructional details, service/core details, architectural expression, 3-D views and models	3rd, 4th, 9th, 11th, 13th, 16th, 17th, 18th, 20th, Sep 2019	Second Half
12	Review - IV (Intermediate Review)				23rd Sep 2019	Second Half
13	Stage VIII	Final plans, sections & elevations, 3D views simultaneously.	Discussions, teacher-student interactions		24th, 25th, 27th Sep 2019	
13	REVIEW - V				30th Sep 2019	Second Half
14	Stage IX	Architectural detailing	Discussions, teacher-student interactions	Final sheets, plan, elevations, sections, views, models, etc.	1st, 4th, 7th, 9th Oct 2019	Second Half
15	Pre Final Submission - INTERNAL REVIEW - REVIEW VI				11th October 2019	Second Half
	Submission of Scanned Soft Copy				16th Oct	

CONSTRUCTION TECHNOLOGY AND MATERIALS VII

Ar. Mahesh Mokha, Ar. Sujata Godbole, Ar. Rashmi Tijare,

Ar. Poornima Deshpande, Ar. Priyanka Sambre, Ar Namrata Gaurkhede, Ar. Nidhi Gandhi

UNIT	TOPIC	OBJECTIVES	TIME REQUIRED	TEACHING METHODS ACTIVE	EXPECTED OUTPUT
Unit I	Introduction to space structures, possibilities in different materials,	To understand the meaning of space Str.	2nd , 12th, 16th,	gridding on real spheres, PPT, Interactive Teaching, models with zoom tool kit. Models and Site Visits	Models (1: polyhedral solids, 2: Geodesic dome,3: Hyperboloid , 4: Space frame)
	Types of space structures and possibilities in different materials to cover large spans.	To make students aware of Diff. Materials used to cover large spans.	19th, 20th, 23rd,		
	General study of shell structures and folded plate structures in concrete, various types, constructional aspects, merits and demerits etc.		26th, 30th July		
Unit II	General study of Grid structures and Skeletal structures, space frames, domes etc. in steel, various types, constructional aspects, merits and demerits, etc.	To make students aware of Different types of grid str. Study of solid geometry to understand diff. types of Domes To study diff. types of Nodes (Joints).	2nd, 3rd, 6th, 9th, 13th, 16th Aug 2019	Paper models of solids to understand the geometry of various types of domes. Site visit to understand Str. System & Roof covering Systems. ppt. on diff. examples of space frame& dome structure. Space frame grid model with tool kit.	Models(hyper paraboloid)

Submission of model & Sketchbook : 9th Aug.					
Unit III	Temporary structures, materials and techniques used, constructional aspects using timber and M.S Sections, design and detailing problems on small temporary structures.	To study diff. types of temporary str. & their Materials & erection.	20th, 23rd, 24th Aug 2019, 3rd, 7th Sep 2019	Studio Work Drafting in studio. To understand fixing. Ppt. on fixing details	Sketches & Sheets
Sheets Submission - 13th September 2019					
Sessional Exam - 12th Aug - 17th Aug					
Unit IV	Pre-cast concrete, Design considerations and constraints, advantages over cast-in-situ construction, construction techniques and jointing details, applications. Modular coordination, RCC pre-fabricated proofing systems to cover large spans, with or without north light.	To make students aware of prefabricated structural Systems& their joining details.	13th, 17th, 20th, 21st Sep 2019	To understand the processes. Ppt. on diff. Joining details	Site visit for prestressed slab construction
Unit V	Study of pre stressed concrete, principals and methods of pre-stressing, system of pre-stressing, advantages and disadvantages and applications.	To understand the methods of pre stressing.	24th, 27th Sep & 1st, 4th Oct 2019	Video of manufacturing of precast prestressed beam.	Sketches + Sheets

Unit VI	General study of various external cladding materials and systems, curtain walling in various materials, construction details of glass curtain.	To understand the meaning of Curtain walling, material and fixing details.	5th & 11th Oct 2019	Site Visits and Presentation	Sheets
Sketchbook and Final sheets submission on 4th October					

Attendance (20)	Subject contents/ Sessional exam/ Surprise exams (40)	Plates, Models, Sketch book, tutorials (20)	Site visit (10)	Viva (10)
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Reference books :

- Advanced Building Construction by Mitchell, Allied Publishers.
- Construction Buildings by R.Barry, Orient Longman.
- Space structures by N. Subramaniam, Wheeler.
- A.J.Handbook of Building Structures by A. Hodgkinson.
- Pre-stressed Concrete Structures by P.Dayaratnan.
- Building Construction illustrated by Francis D.K.Ching, Van Nostrand.
- Concrete Technology by M.S.Shetty, S.Chand and Co.
- Erection of Pre-fabricated Reinforced Concrete Structures by Y.Bessar & V.Proskurnin.
- Structures by Daniel L.Segodak,Prentice – Hall, Inc.
- Structural Concepts and Systems for architects and Engineers by T.Y.Lin and Stotesbury

BUILDING SERVICES VII

Teachers Incharge -Ar. Gurunath Modak, Ar. Priyanka Dhawangale Sambare

The third part of building services approaches with increased complexity and direct relation to design. This is a continued version to previous semester with a larger magnitude wherein you get the information related to causes of fire in buildings, fire frightening regulations to NBC and various design parameters, and added services of Vertical Transportation and Communication systems in buildings, introduction to building automation systems. This semester is not only a theory based subject but you also need to design and handle the services layouts of larger scale projects.

Aim: The aim of the subject is to acquaint you about the importance, installation and working of various services related to campuses and high rise buildings. The scope lies in Fire Fighting systems water services, sanitation, communication systems, HVAC and rain water collection and disposal.

Methodology :

- Various principles of teaching would be used to link the subject to life by visiting ongoing sites, market surveys and delivering lectures by experts.
- Democratic sessions would be carried out where rigorous group discussions will take place.
- Formal and informal teaching methods would be adopted.
- Uniform Teaching methodology will be followed in all semesters

Date/ week	Unit	Topic	Learning objectives	Methodology	Expected output
2 nd July, 9 th July 16 th July, 23 rd July	Unit I	<ul style="list-style-type: none"> • Causes of Fire in buildings ,Types of fire, spread ,production of smoke and poisonous gases. Fire safety and preventive measures. • Fire fighting regulations with reference to NBC.fire escape, stairways and escape routes, dry and wet risers, water demand for fire fighting ,storage tanks, fire hydrants etc • Study of fire detection systems, smoke detectors, heat detectors ,fire alarms etc.Fire extinguishing systems, unit fire extinguishers, chemical and foam extinguishers, chemical and foam extinguishers. 	<p>To acquaint the students with causes of fire in buildings</p> <p>To study and understand the components and system of Fire Fighting and integrate the same in design</p>	<p>Integrating the Commercial cum Residential Project of Design and preparing the Fire Fighting Layout for the same.</p> <p>Guest Lectures</p> <p>Site visits</p>	<p>Sketches, Sheets with detailed layout</p>

		<ul style="list-style-type: none"> Systems of DTH, Introduction, single and multi user DTH system, DTH layout and effectiveness of data management system. 			
Final Submission & Test					

Sessional Work: Layout of Design project including layout for fire fighting, Building automation system, communication in building ,RWH, systems.

Evaluation criteria

Attendance	5
Tests	10
Sessional	15

RESEARCH SKILLS AND PROJECT INTRODUCTION

Teachers-in-charge: Dr. Ujwala Chakradeo, Dr. Sampada Peshwe, Ar. Namrata Tharwani Gaurkhede

Objective: To introduce students to the basics of research methodology which can applied to identification and formulation of their thesis topic.

Contents	Learning Objective	Teachers' Input	Expected Output	Dates
Basics of research methodology	Introduction to the basics of research, discussion regarding research questions	Discussion		3 rd July
Unit 1: Mind mapping by groups of students to identify architectural / social issues	Identification of 3-4 contemporary architectural / social issues To explore various areas associated with the field of architecture	Discussion	Submission on A1 size sheets	10 th July

Submission – Mind Map with identified issues – 10 th July				
Unit 2: Identification of one issue to be taken further by each student. Students to refer to library and internet to identify books/articles	Better understanding of the identified issues through literature	Discussion	List of books and research papers	17 th July
Students to write abstracts (One page) on the selected 2-3 books.	For students to understand to identify the crux of a book and its relation to the topic selected	Discussion with guides and subject teachers	Students to submit abstract of paper in 300 - 400 words	24 th July
Finalization of area of research and further issues to be identified.	Identification of potential research area and to get to thesis domain	Discussions with guide and subject faculty	Typed submission on A4 size sheets	31 st July
Submissions: List of books – 17 th July, Abstracts – 24 th July, Research domain identification with write-up and identified precedent studies - 31 st July				
Introduction to research terminology such as aim, objectives, methodology, types, etc.	Understanding research methodology and framing of aim and objectives	Presentation	-	7 th August
Unit 4: Students to write aim objectives, overall methodology and architectural challenges for thesis domain.	Basic research design of thesis domain.	Discussions with guide and subject faculty	Submission on A4 size sheets.	14 th August
Unit 5: Students to refer to library and internet & identify pertinent precedent studies - both for live study as well as book study.	Identification of precedent studies	Discussions with guide	Submission on A3 size sheets.	Till 21 st August
Submission: First draft of final output 21 st August				
Identification of mode of representation of research work - research paper, article, storyboard or poster		Discussion with mentor	First draft in the form of research paper, article, storyboard or poster	4 th Sep, 11 th Sep, 18 th Sep
Finalization of research work (in ready to be published form)		Discussion with mentor		
Submission: Final submission of a booklet 25 th September				

***Students to be allotted to prospective guides. Students to do discussions with guides and identify area of research for thesis purpose. Thesis in charge faculties would do the allotment.

TOTAL MARKS - ASSIGNMENTS (60) + 25 th Sep	80
ATTENDANCE (20)	20
GRAND TOTAL	100

STRUCTURES

Teachers Incharge – Prof. Rupal Wadegoankar

Sr. No	Topic	Marks Allotted
1.	Study of IS 800	
	Steel Connections	
	Design of Tension Members	
2.	Design of Compression members	
3.	Sessional Exam	30 Marks
4.	Design of Steel Sections in Bending	
5.	Design of Purlins	
	Design subjected to Biaxial Bending	
	Types of Large span structures	

ACOUSTICS AND ILLUMINATION

Teachers Incharge: Prof. Rajagopalan and Ar.Madhuri Gehani

Objective: To make students realize the importance of acoustics in interior spaces and necessity of manipulating acoustical environment in buildings and also to impart knowledge of basic illumination design & illumination system for the indoor spaces.

Date 2019	Content	Teacher's interaction	Expected output
1 st July	Frequency range of audible sounds. Propagation of sound. Sound reflection, diffusion, diffraction. Ref. Acoustics In Building Design by K.A. Siraskar.	Lecture, ppt	Notes
8 th July	Sound Isolation, Mass law, Transmission loss	Lecture, ppt	
15 th July	STC rating, TL for single and double walls sound leaks and flanking.	Lecture, ppt	
22 nd July	Acoustical Material.		
29 th July	Acoustical Material and interior finishes, Sound absorbing materials & their properties. Ref. Architectural Acoustics by David Egan.		Sketching
5 th Aug	Constructional and planning measures for good acoustical design of building in general.		
19 th Aug	Acoustical treatment of Auditorium / Lecture Halls / Conference hall. Ref. Auditorium Acoustics and Architectural Design by M. Barron.	Site visit	
26 th Aug	Sessional exam (30 Marks)		
9 th Sep	Light radiation, its units, Laws of illumination, inverse square law and cosine law.	Lecture, ppt	
16 th Sep	Artificial light calculation by Lumen Method. Light sources, various types of Lamps and their characteristics.		
23 th Sep	Types of lighting systems, task lighting, accent lighting, general lighting, lighting for mood etc.		
30 th sep	Luminaries, their types, properties and uses.	Market research	
7 th oct	Luminaries, their types, properties and uses.	Lecture, ppt	

ELECTIVE A (ADVANCED SPATIAL ANALYSIS)

Teachers-in-charge: Priyanka Sambare, Nidhi Gandhi, one faculty from Astral

Objective- To teach students to develop designs through 3D visualisation, spatial analysis and prepare presentable drawings. (add here whatever required)

Date	Unit to be covered	Inputs and outputs	Evaluation
16 th July	Revit Plugins-hsb timber on revit, BIM object , Autodesk site designer extension		
17 th July	grid generator timber framing for Autodesk revit , frame generator, conceptual massing, and parametric forms with tensile roofing		
18 th July	First look into Rhino 5.0. Introduction, Interface, Navigation, Geometry Types Rhino Commands, Viewports, Saving and Filetypes	Students will start working on their design studio project.	
20 th July	Learn how to draw, modify and measure lines and curves. Background Images, Lines and Polylines, Control Point Curve, Points On, Curve Modification, Mirror, Measuring		
13 th August	Transform lines and curves into freeform surfaces. Extrude Curves, Loft, Sweep, Pipe Planar Surface, Surface by Points		
14 th August	Submission – Form evolution through the above learnt commands for recreation/entertainment Hub	Students will work in the lab	30
17 th Sept	Ways to construct solid models from primitives or surfaces. - Primitives - Offset Surface - Boolean Operations - Extrude Surface - Solid Trim		
18 ^h Sept	Extract 2D vector drawings from your 3D geometry. - Make 2D - Sections - Quick Print		
19 ^h Sept	Apply materials and work with render settings. - Materials		

	- Basic Rendering		
21 st Sep	FINAL SUBMISSION – Soft copy to be evaluated in the computer lab		30

20 marks will be allotted for the attendance.

20 Marks Will be allotted for Sessional exam

All the work in the form of assignments should be strictly done in the lab itself. They can add password to their file to protect from copying.

ELECTIVE B - VALUATION

Teacher Incharge- Prof. Supriya Naware, Asst Prof. Harpreet Kaur Saggu

Date	Topic	Input	Expected output	Evaluation (Marks)
04/07/19	Unit –I Introduction <ul style="list-style-type: none"> • What is Valuation • Purpose of Valuation • Aims & objectives of Valuation • Cost,Price,Value 	Lecture	Notes	
11/07/19	Aspects of Valuation : Economical, Social, Legal, Technical Unit -II Fundamentals of Valuation <ul style="list-style-type: none"> • Real Estate, Property & Legal rights • Market : Demand & Supply • Concept of Ownership & Possession 	Lecture	Notes	
18/07/19	<ul style="list-style-type: none"> • Types of Values • Factors affecting values Unit – III Approaches, Methods, Theories of Valuation <ul style="list-style-type: none"> • Income Approach : Theory of rent • Methods under income Approach: Rental Method , Lease hold property • Limitation of Income approach 	Lecture	Notes	
25/07/19	<ul style="list-style-type: none"> • Market Approach • Types of market : Buyer's & Seller's , stable • Real Estate Market, Demand & supply • Sale comparison method 	Lecture	Notes	

	<ul style="list-style-type: none"> • Development • Limitation of market approach 			
	<ul style="list-style-type: none"> • Cost approach • Types of costs • Methods of estimating building cost • Profit method 	Lecture	Notes	
08/08/19	<ul style="list-style-type: none"> • Various theories of valuation • Belting method • Hypothetical plotting scheme • Hypothetical building scheme • Depreciation & obsolescence 	Lecture	Notes	
SUBMISSION OF TUTORIAL-I				30
22/08/19 – 29/08/19	Unit No. IV Construction of valuation tables <ul style="list-style-type: none"> • Simple interest • Compound interest • Present value of Rupee one (PVA) • Amount per annum (APA) • Sinking Fund • Years purchase 	Lecture	Notes	
05/09/19	Unit No. V Law in Valuation <ul style="list-style-type: none"> • Importance, Ready Reckoner • Transfer of Property Act (Detail) • Land Acquisition Act (Introduction) • Environmental laws (Introduction) 	Lecture	Notes	
12/09/19	<ul style="list-style-type: none"> • Town Planning & zoning (Introduction) • Building Bylaws (Introduction) • IBBI, Company Laws, International Valuation Standards: IVS-5. (Introduction) Unit No. VI Report Writing <ul style="list-style-type: none"> • Essentials of report writing 	Lecture	Notes	
19/09/19	<ul style="list-style-type: none"> • General structure & process of writing • Understanding legal documents • Consequences of report writing • Introduction to case study 	Lecture	Notes	
29/09/19	<ul style="list-style-type: none"> • Site visit 	Lecture	Notes	
03/10/19	<ul style="list-style-type: none"> • Report writing 	Lecture	Notes	
SUBMISSION OF TUTORIAL-II				30
FINAL SUBMISSION OF ALL TUTORIALS				

Attendance	Subject contents/ Sessional exam/ Surprise exams	Assignment 1	Assignment 2	Total
20	20	30	30	100

Elective B – Urban Planning:

Teachers Incharge: Ar. Sujata Godbole, Ar. Poornima Deshpande

(July: 4th, 11th, 18th, 25th, **Aug:** 1st, 8th, 22nd, **Sept:** 5th, 12th, 19th, 26th, **Oct:** 3rd)

Date	Learning Objective for each topic/ content	Teachers interaction	Expected output	Evaluation
Submission: 25th July 2019 Assignment 1: To find out various types of squares in the city. Precedent Study of famous examples.	<ul style="list-style-type: none"> • To study the urban context (surroundings), the connectivity, circulation, open areas, Standards. • To study the activities involved . 	Demonstrations in the form of explanations and discussions	Sheets	20 marks
Submission: 3rd October Review 1 - 22nd Aug 2019 Review 2 - 12th Sep 2019 Review 3 - 26th Sep 2019	Stage I <ul style="list-style-type: none"> • To study the meaning of Renewal and its subsequent effects. • To study the existing development plan and zonal plan of Nagpur. • To study the existing issues & problems in the area. • Traffic survey of identified squares. 	Study area in urban context of Nagpur Master Plan Detailed study area delineation (Base Map)	Sheets	40 Marks
Assignment 2: Renewal of Square Aim: To understand the modalities of renewal of square	Stage II <ul style="list-style-type: none"> • Existing Land use Plan & Land values • Building use & Land ownership 	Inputs in the form of Table Discussions and Display	Sheets	

in a city	<ul style="list-style-type: none"> • Peoples Feedback • Services • Road network & Open Areas 			
	Stage III: Renewal proposal of identified squares.	Inputs in the form of Table Discussions and Display	Sheets	
	Inferences and Conclusions		Sheets	
	Attendance			20 marks
	Sessional			20 marks