LESSONPLAN

NAMEOFTHEFACULTY : DIVYA RATHI
DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
YEAR : 1stYEAR
SUBJECT : **SKETCHING &MODEL MAKING**
LESSON PLAN DURATION : 15WEEKS
WORK LOAD PER WEEK : 08

WEEK	PRACTICAL	
	LECTURE DAY	TOPIC
1st	1	Free-hand of different types of lines Horizontal lines Vertical lines
	2	Exercises of different types of lines :Diagonal lines,Gridlines
2nd	3	Freehand sketching: Two-dimensional geometricall figures Three-dimensional geometrical figures
	4	3Dimensional geometrical objects, Geometrical objects. (Cube, Cones, Prisms, Pyramids, Spheres Cylinders etc.)
3rd	5	Introduction to anthropometrics, Study of anthropometrics
	6	Freehand sketching of human figures, Trees ,Furniture vehicles (One indoor exercise and one outdoor exercise),Vehicles
4th	7	Freehand sketching of small buildings with shade and shadow trees, Human figures,sky,cloudsandbirds,
5th	8	SESSIONAL-I
	9	Free hand sketching landscape elements, Using various mediums like pencil, in k and colours (water colours and pencil colors etc.) ,Freehand sketches of Railway-station Free hand sketches of Railway-station
6th	10	Freehand sketches of parking places
	11	Freehand sketches of Bus stand,
	12	Freehand sketches of market scene,
	13	Freehand sketches of village scene
7th	14	Introduction of model making materials, techniques, Demonstration of model making materials ,techniques techniques
	15	Block models of basic geometrical forms, Prisms ,Pyramids, Cubes ,Cylinders
8th	16	Using the following materials :Hand mades heetivory sheet Thermo cole
	17	Using the following materials :Mount Board/Sun Board/Bal sa Wood Strips
	18	Composition of various geometrical shapes ,different materials

9th	19	SESSIONAL-II
	20	Sculpture Making Thermocole (Striper)
10th	21	Mount Board/sun board/ Balsa wood strips
	22	Claymodeling
11th	23	Making model /Sculpture materials such as copper wire,ceramicsmisc.materials like leather
	24	Brick Masonry, Laying of bricks in different bonds
12th	25	Painting and Polishing
	26	Introduction to painting tools ,equipment
13th	27	Preparation of different colors
	28	Surface preparation before painting(steel),
14th	29	Painting Steel Items
	30	Spray Painting metal items
15th	31	Surface preparation before painting (wood) ,Painting wooden ,Spray Painting wooden
	32	Surface preparation before polishing (wood) Spray Painting wooden
16th	33	SESSIONAL-III

LESSONPLAN

NAMEOFFACULTY : DIVYARATHI
DISCIPLINE : ARCHITECTURALASSISTANTSHIP
YEAR : 1ST YEAR
SUBJECT : **ARCHITECTURALDRAWING–I**
LESSONPLANDURATION : 15WEEKS
WORKLOADPERWEEK : 08

WEEK	PRACTICAL	
	LECTURED AY	TOPIC
1ST	1	Introduction and relevance Need and Importance of the architectural drawing, Basics of drafting instruments
	2	Basics of stationery (Pencils,sharpening, types of sheets, erasers ,cutter etc.) ,Demonstration by the teacher on holding pencils, fixing parallel barandhandlin go the retools and equipment used in Architectural Drawing Basiclinework,withdifferentpencilthicknessIntensitiesH,HB,2B,4B,6B
2ND	3	LineWork:Horizontallines,Verticallines,GridLine
	4	Diagonal lines ,Composition, Pattern making in line work
3RD	5	Lettering, Lettering Using different shades, Using different pencils &pens, stencils ,Different styles ,heights & intensities
	6	Introduction to Scale, Use of the modular scale ,Metric system and FPS
4TH	7	Geometric Shapes (Plan ,elevation etc), Simple geometric (cubes ,cylinder, consent),Complex (fusion of the basics hapes) ,In corporating the use of scale both feet & metric
	8	Ortho graphic Projections,Ortho graphic Projections & planes
5TH	9	Dimensioning and its elements, methods, and arrangements of symbols for shape indication.
	10	**SESSIONAL-I**
	11	Introduction to Planes, Projections of Points.

6TH	12	Projections of lines
7TH	13	Projection of solids,
	14	Section of Solids, Simple geometrical shapes
8TH	15	Elementary building sections ,Highlighting line, Intensities for sectional components ,Elevational components for exp Parapetand Chajja
	16	Developmentofsurface,Developmentwithanaimtocalculateareas
9TH	17	**SESSIONAL-II**
	18	Isometric Views(30^O–30^O)
10th	19	Isometric Views(30^O–60^O)
	20	2D Geometrical shapes
11th	21	2D Geometrical shapes
	22	Conversion of 2D geometrical shapes into 3 D Isometric views ,Conversion of 2D geometrical shapes into3D isometric views
12th	23	3 D isometric views
	24	Complex solid to basic building forms
13th	25	Axonometric Views,2D Geometrical shapes
	26	Conversion of 2D Geometrical shapes
14th	27	3D Axonometric views, Different angles(45^O–45^O)
	28	Simple to complex solid to basic building forms, Isometric/axonometric use of any building form
15th	29	Base plan ,Exterior components, Interior components
	30	Exterior/interior components(with roads ,lands cape elements)
16th	31	**SESSIONAL-III**

LESSON PLAN

NAMEOFTHEFACULTY : DIVYA RATHI
DISIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 3rd
SUBJECT : BUILDING SERVICES

LESSIONPLANDURATION : 15
WEEKSWORKLOADPERWEEK : 03 (L)

Week	THEORY	
	LECTURE Day	Topic
1ST	1	Water Supply -Water as natural resource , public health significance of water quality, demand of water for domestic, commercial, industrial andpublic utilitypurposesas per BISstandards.
	2	Percapita demand, leak age and wastage of water and its preventive measures
2nd	3	System of water supply – continuous, intermittent, their advantages and disadvantages, Storage and Distribution of Water: Different methods of water distribution boosting water ,gravity and pressure distribution by Storage tanks of individual buildings
	4	Hot water supply for buildings including solar water heating, Service connections ,types and sizes of pipes water supply fixture and installations, Concept of Rain water harvesting.
3rd	5	Drainage-Principles of drainage ,surface drainage ;combined and separate System of drainage shape and sizes of drains and sewers ,storm water overflow chambers ,methods of laying and construction of sewers
	6	House drainage: traps – shapes, sizes, types, materials and function,Inspection chambers–sizes,andconstruction
4th	7	Ventilation of house drainage–anti-siphon age and vent pipes ,single stack and double stack system,
	8	Functions and working of sinks, wash basins ,water closets ,flushing cisterns ,urinals,–sizes and types ,Septic tanks, see page and soak pits
5th	9	Simple exercises on layout plans for toilet and kitchens for public and residential buildings including the placement, distances and fixing details
	10	**SESSIONALTEST-I**
6th	11	Lighting and Electrical Fittings-Electrical distribution-conduits for wiring
	12	CFL and other lamps, thumb rules for calculation of illuminating level,

7th	13	various systems of wiring and theirs ustainability
	14	Symbolic representation of electrical fittings for different work areas in residential building(e.g.bed room ,living room, kitchen, study and toilet)
8TH	15	Symbolic representation of electrical fittings for different work areas in residential building(e.g.bed room ,living room, kitchen, study and toilet)
	16	Preparation of electrically out of as impel residential building ,Precautions to avoid electrical accidents
9th	17	Heat ,Ventilation and Air Conditioning(HVAC)-Behavior of heat propagation
	18	Thermal insulating materials and their co-efficient of thermal conductivity
10th	19	General methods of the rmalinsulation
	20	**SESSIONAL-II**
11th	21	Thermalin sulation of roofs ,exposed walls, Ventilation
	22	Definition and necessity, System of ventilation(Mechanical)
12th	23	Essential so fair-conditioning system, Fire Fighting Services-Causes of fire In Buildings
	24	Classification of building materials according to fire rating; fire alarm systems
13th	25	Introduction to fire-fighting system, precaution and controlling devices(fire panels,doorandwindowsautomation,firehydrantsandsprinklers)
	26	Fire escape elements(stair cases ,ramps,),provision sin building from fire safety angle as per BIS
14th	27	Heat detectors ,and fire detection system
	28	Vertical Transportation Systems-Classification and types of lifts
15th	29	Lift sizes, provision and installation ,escalators, sizes, safety norm stobe adopted
	30	SESSIONALIII

LESSONPLAN

NAMEOF THEFACULTY : SURBHI

DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER :3rd

SUBJECT : **HOA-I**

LESSON :15WEEKS

WORKLOADPER WEEK 04

Week	Theory	
	Lecture Day	**Topic**
1st	1	Introduction to HISTORY OF ARCHITECTURE
	2	Importance of history to understand the Architecture
	3	Examples of Early shelters, Stone Age, Tumuli, etc. as expression of man's physical and spiritual needs.
	4	Examples of Early shelters, Stone Age, Tumuli, etc .as expression of man's physical and spiritual needs.
2nd	5	Determinants of built form–geo physical ,societal ,technological etc.
	6	(Early caves, timber huts, stone houses etc).
	7	Western Civilization
	8	Egyptian Civilization Concept of the Royal Necropolis
3rd	9	Location al context and architectural characteristics of public buildings
	10	e.g. Mastabas (master of sakara)and pyramids(rock–cut and structural) –one example of each type to be chosen
	11	Mesopotamian Civilization
	12	
4th	13	Theurban context and architecture of public buildings (Ziggurats)-one example.
	14	Greek and Roman Civilizations
	15	Greek Civilization, Location and characteristics of typical civic spaces such as Agora, Acropolis, Stoa.
	16	Significant characteristics of Greek Architecture such as Materials, construction systems

5th	17	System of proportioning Greek orders, architecture of Greek temples– Parthenon, Athens.
	18	Roman Civilization-Significant characteristics of Roman Architecture.
	19	**SESSIONALTEST-1**
	20	Concept of monumentality, materials and construction systems,
6th	21	Roman orders ,Coliseum
	22	Pantheon Rome ,their form ,and constructional/structural systems.
	23	IndianCivilizationandBuddhistArchitectureinIndia
	24	
7th	25	Indus Valley Civilization: Form of the Harappa city,
	26	Location and role of public buildings.
	27	Architecture of the typical(Harapp and welling)
	28	
8th	29	Great Granary and Great Bath.
	30	The Vedic Village,
	31	Building typology and construction.
	32	Buddhist Architecture in India Building typology
9th	33	Stupas
	34	Chaitya Hall
	35	Vihara one example from each ;construction methods and ornamentation
	36	Temple Architecture in India
10th	37	Evolution of temple and its various parts.
	38	Dravidian style(Southern)
	39	**SESSIONALTEST-2**
	40	Dravidian style(Southern)
11TH	41	General characteristics,
	42	Construction methods and material

	43	Construction methods and material
	44	(e.g. .shore temple at Mahabalipuram,)
12th	45	architectural form, planning components, construction methods,materials,motifs
	46	Indo Aryan Temple (North Indian)
	47	Sun Temple Konark;
	48	Architectural form,
13th	49	Planning components, construction methods, materials ,motifs
	50	Lingaraja Temple at Bhubaneswar
	51	Architectural form, planning components,
	52	Construction methods ,materials, motifs
14th	53	Kandariya Mahadeo at Khajuraho
	54	Architectural form, planning components,
	55	Construction methods, materials ,motifs
	56	Jain temple sin India
15th	57	Dilwara temple ,Mt. Abu
	58	Architectural form, planning components, Construction methods ,materials ,motifs
	59	**SESSIONALTEST-3**

LESSONPLAN

NAMEOFTHEFACULTY :GURDEEP
DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER :3rd
SUBJECT : **ARCHITECTURE DRAWING –III**
LESSONPLANDURATION :15
WEEKSWORKLOADPERWEEK :04

WEEK	PRACTICALTOPIC
1ST	**Basic of Perspective:** Introduction to basic terminology (picture plane. Vanishingpoint, Station point, cone of vision etc) Introduction to types of perspective - (One-point, Two-point, Bird'seyeview, worm'seyeview, normaleyeviewetc.)(vanishing pointmethod)
2ND	**Drawing of Two-Point Perceptive Views:** Geometrical shapes in corporating all views: Planes, cones, cubes, cylinders, pyramid etc. Bird's eye view, Normal eye view, Wormseyeview
3RD	Geometrical shapes in corporating all views :planes, cones ,cubes ,cylinders pyramid etc .Bird' s eye view ,Normal eye view, Worms eye view
4TH	Two point perspective of simple building such as Guard room, kiosk etc
5TH	**IST SESSIONALTEST**
6TH	Two point perspective of simple building such as Guard room ,kiosk etc
7TH	**Drawing of One-Point Perceptive Views :**Geometrical shape incorporating all views: ,cones, cubes , cylinders ,pyramid etc.
8TH	Onepoint perspectiveofagivenplanofkitchenand drawingroom.
9TH	**Introduction to Scio graphy –in Plans and Elevation**. Geometrical shapes such as :planes ,cones, cubes, cylinders, pyramid etc.
10TH	**2ND SESSIONALTEST**
11TH	Geometrical shapes such as :planes, cones, cubes ,cylinders ,pyramid etc.
12TH	Sciography of simple building such as Guard room ,kiosk etc.
13TH	**Introduction to Rendering:** Demo from teacher in different mediums – colour pencils, crayon, Colour wash. Markers etc.
14TH	Rendering Techniques in pen and ink, Different colour mediums. Rendering of a given perspectives
15TH	**2ND SESSIONALTEST**

LESSON PLAN

NAME OF THE FACULTY : SH. RAJESH KUMAR
DISIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 3rd
SUBJECT : BASIC DESIGN AND VISUAL ARTS
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK : 08 (P)

Week	Practical	
	Lecture Day	**Topic**
1ST	1	Basic elements of Anthropometrics with respect to average measurements of human body of adult in different postures-its proportion and graphic representation.
	2	Basic elements of Anthropometrics with respect to average measurements of human body of children in different postures-its proportion and graphic representation.
2ND	3	Human body (Anthropometrics), Various activities of human body , Proportion of Components of Human Body , The proportions of the different components of the human body; Examples from Le Corbusier Modular Man , VastuPursha Mandala.
	4	Human Activities : Basic human functions and their implications for spatial planning. Minimum and optimum areas for various functions. Activity space analysis related to form, function and expression of individual spaces like Bed room , Drawing room
	5	Human Activities : Basic human functions and their implications for spatial planning. Minimum and optimum areas for various functions. Activity space analysis related to form, function and expression of individual spaces like Kitchen, Bath room etc .
	6	Furniture standards (sizes of domestic and public furniture); Toilet - sizes and standards;
4TH	7	Furniture standards (sizes of domestic and public furniture); Kitchen equipment - sizes and standards;
	8	windows - sizes, standards and locations.
5TH	9	**SESSIONAL Ist**
	10	Doors - sizes, standards and locations.
6TH	11	Standard Parking l a y o u t s s h o w i n g t u r n i n g r a d ii for two-wheelers. Parking layouts at various angles (parallel, 45 degrees, 90 degrees), Standard road width.
	12	Standard Parking l a y o u t s s h o w i n g t u r n i n g r a d iifor cars, buses, etc. Parking layouts at various angles (parallel, 45 degrees, 90 degrees), Standard road width.
7TH	13	Street furniture : Standards for drinking fountains, waiting queues at bus stops, garden seats, waste bins, telephone booths, street lights, foot paths, public walkways, railing etc.
	14	
8TH	15	Street furniture : Standards for drinking fountains, waiting queues at bus stops, garden seats, waste bins, telephone booths, street lights, foot paths, public walkways, railing etc.
	16	Street furniture : Standards for drinking fountains, waiting queues at bus stops, garden seats, waste bins, telephone booths, street lights, foot paths, public walkways, railing etc.
9TH	17	Street furniture : Standards for drinking fountains, waiting queues at bus stops, garden seats, waste bins, telephone booths, street lights, foot paths, public walkways, railing etc.

	18	Graphic Representation of plant material (ground cover, foliage, shrubs, trees).
10TH	19	Graphic Representation of plant material (human figures and vehicles).
	20	**SESSIONAL-II**
11TH	21	Introduction to AutoCAD (Latest version or AutoCAD2007) Input devices• Graphics• Starting AutoCAD• Inside the drawing editor• Commands in the menus (Tool bars)•Accessing Commands• Entity selection• Entering coordinate•
	22	• Accessing Commands• Entity selection• Entering coordinate• Folders for organizing drawings and files Exercise: Creating folders and sub folders
12TH	23	Creating and Saving a new Drawing Commands and options to create new drawings• Units• Limits• Snap• Grid• Ortho• Layer
	24	Application of layers• Open a new, existing drawing• Save, save as, quit, close, exit•
13TH	25	Customization of tool bars• Exercise: Setting up a new drawing with units, limits etc .
	26	Draw Commands Line• Poly line/Multi line.• Arc• Ellipse• Polygon• Rectangle• SP line• Circle• Sketch.• Hatch• Donuts•
14TH	27	Modifying an Existing Drawing Commands Undo Redo/Oops• Trim• Move•
	28	Offset• Rotate• Array• Stretch• Divide•Champher• Erase• Break• Copy, multiple copy• Mirror (Mirror test)•
15TH	**29**	Change (change properties)• Extend• Explode• Blip mode• Scale• Fillet• Design center.
	30	SESSIONAL III

LESSON PLAN

NAME OF THEFACULTY : SUNIL RAI
DISCIPLINE : ARCHITECTURALASSISTANTSHIP
SEMESTER : 3rd
SUBJECT : **CLIMATOLOGY**
LESSONPLANDURATION : 15WEEKS
WORK LOADPERWEEK : 03
SESSION : 2024-25

WEEK	LECTURE DAY	THEORY TOPIC
1ST	1.	**General Introduction :**Introduction to climatology
	2.	Movement of earth around sun,
	3.	Elements of climate (Wind, temp, humidity,).
2ND	4.	Elements of climate (precipitation, pressure).
	5.	Different Climatic Zones.
	6.	Orientation of building with respect to above mentioned elements of climate
3RD	7.	Effect of climate on man and shelter.
	8.	**Relation of Climate and comfort:** Macro-micro climatic effects
	9.	Difference between Climate and comfort
4TH	10.	Difference between Macro-micro climatic effects
	11.	Concept of comfort zone and bio-climatic chart
	12.	Concept of comfort zone and bio-climatic chart
5TH	13.	Climatic evaluation by season
	14.	Climatic evaluation by season
	15.	IST SESSIONAL TEST
6TH	16.	**Sun Control and shading devices (without calculations)**
	17.	Solar Chart (sun path diagram)

	18.	Orientation for sun
7TH	19.	Internal and external sun protection devices
	20.	Internal and external sun protection devices
	21.	Natural lighting
8TH	22.	Introduction of Solar Passive Design
	23.	Objectives of Solar Passive Design
	24.	Passive solar heating and cooling
9TH	25.	**Wind control:** Orientation with respect to wind
	26.	Orientation with respect to wind
	27.	Wind protection devices
10TH	28.	Use of building materials with respect to climate: Concrete, Brick, Glass
	29.	Use of building materials with respect to climate: Plastics, Stone, Insulating material
	30.	2ND SESSIONAL TEST
11TH	31.	**Environment and Ecology:**
	32.	Environment and Ecology
	33.	Basic elements of ecology
12TH	34.	Concepts of natural cycles in Eco-system
	35.	Source of noise and air pollution
	36.	Noise and air pollution effects
13TH	37.	Noise and air pollution controls
	38.	Use of landscape elements
	39.	Use of landscape elements for micro and macro climate control
14T	40.	Use of landscape elements for micro and macro climate control

H	41.	Introduction to climate change
	42.	Principle causes of climate change
15TH	43.	Climate change: effects- methods of mitigating climate change
	44.	Climate change: effects- methods of mitigating climate change
	45.	3RD SESSIONAL TEST

LESSON PLAN

NAME OF FACULTY	:	Smt. SEREBDEEP KAUR
DISCIPLINE	:	ARCHITECTURAL ASSISTANTSHIP
SEMESTER	:	5th
SUBJECT	:	LANDSCAPE DESIGN (ELECTIVE-I)
LESSON PLAN DURATION	:	15 WEEKS WORK LOAD
(LECTURE/PRACTICAL)	:	3 PERIODSPER WEEK

WEEK	**THEORY**	
	LECTURE DAY	**TOPIC**
1st	1	Elements of Landscape a) Plants (Trees, shrubs, ground covers, Flowering species, climbers)
	2	b) Water
	3	c) Earth forms
2nd	4	d) stones
	5	e) Artificial elements
	6	f) man-made elements
3rd	7	Explain of principles of landscape design
	8	Explain landscape design with respect to architectural functions
	9	Architectural functions a) Form
4th	10	b) Symmetry
	11	c) Balance
	12	d) Texture

5th	13	e) Colour
	14	f) Contrast
	15	**SESSIONAL TEST-1**
6th	16	g) Proportions
	17	h) scale
	18	i) Simplicity
7th	19	j) Focus
	20	k) Rhythm
	21	l) Aesthetics (Visual aspects)
8th	22	m) Aesthetics (functional aspects)
	23	Explain Relationship of landscape & climate
	24	Relationship of landscape & climate a) Orientation
9th	25	b) Sun Control by Plants
	26	c) Wind control by plants
	27	d) Microclimate Human comfort
10th	28	e) Human comfort
	29	Outdoor functional spaces
	30	**SESSIONAL TEST-2**
11th	31	Importance of outdoor functional spaces in landscape design
	32	Outdoor functional spaces with respect to different building types.
	33	Outdoor functional spaces with respect to different building types
12th	34	Outdoor functional spaces with respect to different building types

	35	Various types of gardens :- Japnese gardens,
	36	Mughal gardens
13th	37	Topiary gardens
	38	Importance of different types of gardens in landscape design
	39	Landscape design of an outdoor area within an existing building
14th	40	Landscape design of an outdoor area within an group of Buildings
	41	Landscape design of an outdoor area within an Park design
	42	Landscape design of the architectural design project students are currently working on.
15th	43	Work on architectural design project
	44	Representation of Landscape drawings
	45	**SESSIONAL TEST-3**

LESSON PLAN

NAME OF THE FACULTY : Sh. PARDIP KUMAR MITTAL
DISIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 5th
SUBJECT : QUANTITY SURVEYING AND VALUATION
LESSION PLAN DURATION : 15
WEEKSWORK LOAD PER WEEK : 04

Week	Theory	
	Lecture Day	**Topic**
1st	1 & 2	Introduction to quantity surveying and its importance.
	3 & 4	Duties of quantity surveyor
2nd	5 & 6	Types of estimates Preliminary estimates - Plinth area estimate
	7 & 8	Cubic rate estimate Estimate per unit base
3rd	9 & 10	Detailed estimates Definition
	11 & 12	Stages of preparation – details of measurement and calculation of quantities and abstract
4th	13 & 14	Measurement Units of measurement for various items of work as per BIS:1200
	15 & 16	Rules for measurements
5th	17 & 18	Different methods of taking out quantities – centre line method
	19 & 20	**Sessional Test-1**
6th	21 & 22	Different methods of taking out quantities – short wall and long wall method
	23 & 24	Running and maintenance cost of construction equipment 7 Measurement Book and Billing Entries in measurement book
7th	25 & 26	Standard measurement book
	27 & 28	Checking of measurement
8th	29 & 30	Preparation of bill
	31 & 32	First and final bill
9th	33 & 34	Running account bill
	35 & 36	Advance payment, secured advance payment
10th	37 & 28	Refund of security money
	39 & 40	**Sessional Test-2**
11th	41 & 12	Contractor ship Meaning of contract
	43 & 44	Contractor ship Qualities of a good contractor and their qualifications
12th	45 & 46	Contractor ship Essentials of a contract
	47 & 48	Contractor ship Types of contracts, their advantages, dis-advantages and suitability, system of payment

13th	49 & 50	Contractor ship Single and two cover-bids; tender, tender forms and documents, tender notice,
	51 & 52	Submission of tender and deposit of earnest money
14th	53 & 54	Security deposit, retention money, maintenance period
	55 & 56	Preparation of Tender Document based on Common Schedule Rates (CSR)
15th	57 & 58	Introduction to CSR and calculation of cost based on premium on CSR Specifications
	59 & 60	**SESSIONAL TEST-3**

LESSON PLAN

NAME OF FACULTY : Sh. SUNIL RAI
DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 5TH
SUBJECT : COMPUTER APPLICATIONS IN ARCHITECTURE
LESSON PLAN DURATION : 15 WEEKS
WORK LOAD (LECTURE/ PRACTICAL) PER WEEK : 4 PERIODS

	PRACTICAL	
WEEK	PRACTICAL DAY	TOPIC
1st	1	Introduction to AutoCAD: Starting up, practice on – how to create a new drawing file, setting drawing limits & saving a file.
2nd	2	Drawing lines in different ways using absolute co-ordinates, user co-ordinates, WCS, UCS, drawing circles, arcs, ellipses. polygons, splines, polylines, using window, zoom commands
3rd	3	Practice on Modify commands such as erase, copy, mirror, array, offset, rotate, oops, undo, redo, scale, stretch command
4th	4	Practice on Text commands: editing text, text size, text styles, change properties commands
5th	5	SESSIONAL TEST-1
6th	6	Practice on trim, break, extend, chamfer, fillet, O snap command; Draw orthographic views of simple objects
7th	7	Practice on Layer Commands: creating layer, freeze, layer on/off, lock & unlock layer, move from one layer to other.
8th	8	Practice on Layer Commands: color assigning, current layer, load line type; Practice on hatching,
9th	9	Practice on Dimensioning, linear dimensioning, angular dimensioning radius/diameter dimensioning, snap command, aligned dimensioning; applying tolerance; Editing of dimensioning
10th	10	SESSIONAL TEST-2
11th	11	Practice on print commands. Export commands Practice on plot commands. Import commands
12th	12	Practice on making complete drawings of 2 Dimensional geometrical figures using AUTOCAD (2D)
13th	13	Practice on making complete drawings of composition of 2 Dimensional geometrical figures using AUTOCAD (2D)
14th	14	Practice on making complete Single storey plan of using AUTOCAD (2D)
15th	15	SESSIONAL TEST-3

LESSON PLAN

NAME OF THE FACULTY : Sh. Sunil Rai
DISIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 5th
SUBJECT : ARCHITECTURAL DESIGN - III
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK : 08

Week	Theory	
	Lecture Day	Topic
1st	1	Introduction about design, Introduction about Health centre, Framing of Requirement, Inter- relation of various spaces and circulation pattern.
	2	Site visit to Health centre to studying the planning, inter relation of space and various areas, circulation pattern, Landscaping, Lighting / Vent. And other features
2nd	3	Report working of the Health Centre visitef with sketches
	4	Discussion and viva voce of report
3rd	5	Preliminary design started with concept plan
	6	Discussion and finalization of rough plan
4th	7	Preliminary of G.F plan & Site plan
	8	Completion of all floor plans with furniture layout & rendership, Elevation section and view
5th	9	SESSIONAL TEST-1
	10	Completion of set of plans, elevations, view with full rendering
6TH	11	Viva- Voce and checking of Health Centre Project
	12	Viva- Voce and checking of Health Centre Project
7TH	13	Site Visit to Shopping Complex
	14	Test of Shopping Complex
8TH	15	Test of continued
	16	Viva- Voce of Shopping Complex Drawings

9TH	17	Introduction about nursery school project framing of requirements, inter- relation of spaces and circulation pattern.
	18	Site visit to nursery school to study the planning, inter relationship of spaces, various areas, circulation pattern, landscape designing , furniture detailing, light, ventilation etc.
10TH	19	Report marking of Nursery school visited in previous week. Discussion and finalization of rough plan
	20	SESSIONAL TEST-2
11TH	21	Preliminary design started with conceptual plan.
	22	Discussion and finalization of rough plan.
12TH	23	Preparation of ground floor plan, site plan.
	24	Completion of plans with furniture layout and rendering
13TH	25	Preparation of elevation, sections and view.
	26	Completion of set of all nursery school drawings with full rendering.
14TH	27	Viva- Voce Exam
	28	Viva- Voce and checking of Drawings
15TH	29	Completion of all pending works / drawings
	30	SESSIONAL TEST-3

LESSON PLAN

NAMEOFTHE FACULTY : Sh. Gurdeep Malik

DISCIPLINE : ARCHITECTURALASSISTANTSHIP

SEMESTER :5th

SUBJECT : **ST. SYSTEM-I**

LESSON PLAN DURATION 15 weeks

15WEEKS WORKLOADPERWEEK : 03

WEEK	LECTURED AY	THEORY
		TOPIC
1ST	1.	Force: Definition, effect, characteristics,
	2.	Force Systems: Coplanar and non-coplanar force systems
2ND	3.	Types of coplanar Forces
	4.	Collinear, Concurrent, Parallel Forces
3RD	5.	Non-concurrent and non-parallel forces
	6.	Resultant force and components of a force
4TH	7.	Laws of forces: Parallelogram, Triangle and polygon Laws of forces
	8.	Definition of centre of Gravity and Centroid
5TH	9.	Centroid by method of moments of areas for square, rectangular, triangular cross-section
	10.	ISTSESSIONALTEST
6TH	11.	Centroid by method of moments of areas for L-shape, T shape and I shape cross- section
	12.	Moments of Inertia by methods of moments and Radius of Gyration.
7TH	13.	Definition of stress and strain
	14.	Types of stress and strain

8th	15.	Stress strain curve for mild steel
	16.	Hook's Law (Theory) Elasticity, Elastic limit
9th	17.	Shear Force and Bending Moment
	18.	Types of loads- Dead load, Live load, snow, wind and seismic loads as per IS:875
10th	19.	Types of loading: Point load, uniformly distributed load and uniformly varying load.
	20.	2NDSESSIONALTEST
11th	21.	Types of Supports: Hinged, fixed supports, types of reactions provided by each type of support.
	22.	Types of Beams: Simply supported, cantilever, overhanging and continuous beams (description only)
12th	23.	Concept of bending moment and shear force.
	24.	Bending moment and shear force diagrams for simply supported beam subjected to point loads and uniformly distributed loads .
13th	25.	Bending moment and shear force diagrams for cantilever subjected to point loads and uniformly distributed loads .
	26.	Bending moment and shear force diagrams for overhanging beams subjected to point loads and uniformly distributed loads only.
14th	27.	Types of Structure Systems & its applications
	28.	Load-Bearing Structures ,Frame Structures
15th	29.	Cable and Tensile Structures , Hybrid Structure Systems, Shell Structures ,Truss Structures
	30.	3RDSESSIONALTEST

LESSONPLAN

NAMEOFTHE FACULTY :DIVYA
DISCIPLINE :ARCHITECTURALASSISTANTSHIP
SEMESTER :5th
SUBJECT :**BUILDING MATERIAL &CONSTRUCTION-IV**
LESSIONPLANDURATION :15
WEEKSWORKLOADPERWEEK :06

WEEK	LECTURED AY	PRACTICAL TOPIC
1st	1.	Ceiling Materials (Size, quality, availability, types of finishes, uses, trade names, market rate and application methods) Hession cloth, Gypsum plaster boards plaster of Paris board
	2.	Ceiling Materials Plain AC sheets – E board
2nd	3.	Ceiling Materials Plywood, Hard Board, Cellotex
	4.	Ceiling Materials Fiber Boards • Fiber glass • Asbestos tiles •Thermocoal• Medium density fiber board (MDF)
3rd	5.	Roofing Materials GI sheets, Shingle
	6.	Roofing Materials Ferro-cement sheets, Fiber sheets
4th	7.	Roofing Materials Slates, Manglore tiles, Pan tiles, Corrugated PVC sheets
	8.	Roofing Materials Their standard sizes, uses, availability, prices and knowledge about supporting system
5th	9.	Additives and Admixtures Water repellants and water proofing agents
	10.	Additives and Admixtures Accelerators
	11.	ISTSESSIONALTEST

6th	12.	Additives and Admixtures Air entraining agents, Hardeners
7th	13.	Additives and Admixtures Workability increasing agents
	14.	Additives and Admixtures Fly ash
8th	15.	Additives and Admixtures Their availability, uses, costs, performance specifications, and properties used under various conditions.
	16.	Kitchen and Toilet Fixtures Introduction
9th	17.	Market survey of various materials and collection of data with reference to their properties, sizes, costs, designs etc.
	18.	Specifications of kitchen and toilet fittings and fixtures, their popular brand names, shapes and sizes
10th	19.	Earthquake resistant building configuration
	20.	Principles of earthquake resistance, effect of building form on seismic behavior, building configuration for improved earthquake resistance
11th	21.	2NDSESSIONALTEST
	22.	Steel Sections Steel doors and windows using standard rolled sections
12th	23.	Rolling and collapsible structure
	24.	Steel Roofs Line diagram of steel roofs for various span
13th	25.	Steel Roofs Construction details of steel roofs
	26.	Steel Roofs Roof covering: AC, GI sheets
14th	27.	Steel Roofs North light truss
	28.	Frame and Sealed Connections Built Up Steel Columns and Beams Beam to beam framed connection
15th	29.	Frame and Sealed Connections Built Up Steel Columns and Beams Beam to column framed connection
	30.	3RDSESSIONALTEST