LESSON PLAN

NAME OF FACULTY : RAJESH KUMAR
DISCIPLINE : ARCHITECTURALASSISTANTSHIP
SEMESTER : 1ST
SUBJECT : **ARCHITECTURALDRAWING–I**
LESSONPLANDURATION : 15WEEKS
WORKLOADPERWEEK : 08

WEEK	PRACTICAL	
	LECTURED AY	TOPIC
1ST	1	Introductionandrelevance NeedandImportanceofthearchitecturaldrawing, Basicsofdraftinginstruments
	2	Basics of stationery (Pencils,sharpening, types of sheets, erasers,cutteretc.) ,Demonstrationbytheteacheronholdingpencils,fixingparallelbarandhandlingothertoolsandequipmentusedinArchitecturalDrawing Basiclinework,withdifferentpencilthicknessIntensitiesH,HB,2B,4B,6B
2ND	3	LineWork:Horizontallines,Verticallines,GridLine
	4	Diagonallines ,Composition,Patternmakinginlinework
3RD	5	Lettering, LetteringUsingdifferentshades, Usingdifferentpencils&pens,stencils,Differentstyles,heights&intensities
	6	IntroductiontoScale,Useofthemodularscale,MetricsystemandFPS
4TH	7	Geometric Shapes (Plan,elevationetc), Simple geometric(cubes,cylinder,consent),Complex(fusionofthebasicshapes),Incorporatingtheuseofscalebothfeet&metric
	8	OrthographicProjections,OrthographicProjections&planes
5TH	9	Dimensioninganditselements, methods,andarrangementsofsymbolsforshapeindication.
	10	**SESSIONAL-I**
	11	IntroductiontoPlanes,ProjectionsofPoints.

6TH	12	Projectionsoflines
7TH	13	Projectionofsolids,
	14	SectionofSolids,Simplegeometricalshapes
8TH	15	Elementarybuildingsections,Highlightingline, Intensitiesforsectionalcomponents,ElevationalcomponentsforexpParapetandChajja
	16	Developmentofsurface,Developmentwithanaimtocalculateareas
9TH	17	**SESSIONAL-II**
	18	IsometricViews(30^O–30^O)
10th	19	IsometricViews(30^O–60^O)
	20	2DGeometricalshapes
11th	21	2DGeometricalshapes
	22	Conversionof2Dgeometricalshapesinto3Disometricviews,Conversionof2Dgeometricalshapesinto3Disometricviews
12th	23	3Disometricviews
	24	Complexsolidtobasicbuildingforms
13th	25	AxonometricViews,2DGeometricalshapes
	26	Conversionof2DGeometricalshapes
14th	27	3DAxonometricviews, Differentangles(45^O–45^O)
	28	Simpletocomplexsolidto basicbuildingforms,Isometric/axonometricuseofanybuildingform
15th	29	Base plan,Exteriorcomponents, Interiorcomponents
	30	Exterior/interiorcomponents(withroads,landscapeelements)
16th	31	**SESSIONAL-III**

LESSON PLAN

NAMEOFTHEFACULTY : DIVYA RATHI
DISCIPLINE : ARCHITECTURALASSISTANTSHIP
SEMESTER : 1st
SUBJECT : **SKETCHING&MODELMAKING**
LESSONPLANDURATION :15WEEKS
WORKLOADPERWEEK: 08

WEEK	PRACTICAL	
	LECTURE DAY	**TOPIC**
1st	1	Free-handofdifferenttypesoflinesHorizontallinesVerticallines
	2	Exercisesofdifferenttypesoflines:Diagonallines,Gridlines
2nd	3	Freehandsketching:Two-dimensionalgeometricalfiguresThree-dimensionalgeometricalfigures
	4	3Dimensionalgeometricalobjects,Geometricalobjects.(Cube,Cones,Prisms,Pyramids,SpheresCylindersetc.)
3rd	5	Introductiontoanthropometrics,Studyofanthropometrics
	6	Freehandsketchingofhumanfigures,Trees,Furniturevehicles(Oneindoorexercise andoneoutdoorexercise),Vehicles
4th	7	Freehandsketchingofsmallbuildingswithshadeandshadowtrees,Humanfigures,sky,cloudsandbirds,
5th	8	SESSIONAL-I
	9	Free hand sketchinglandscape elements, Using variousmediumslikepencil,inkandcolours(watercoloursandpencilcolorsetc.),Free hand sketchesofRailway-stationFreehandsketchesofRailway-station
6th	10	Freehandsketchesofparkingplaces
	11	FreehandsketchesofBusstand,
	12	Freehandsketchesofmarketscene,
	13	Freehandsketchesofvillagescene
7th	14	Introduction of model makingmaterials, techniques, Demonstration ofmodelmakingmaterials,techniquestechniques
	15	Blockmodelsofbasicgeometrical forms,Prisms,Pyramids,Cubes,Cylinders
8th	16	Usingthefollowingmaterials:HandmadesheetivorysheetThermocole
	17	Usingthefollowingmaterials:MountBoard/SunBoard/BalsaWood Strips
	18	Compositionofvariousgeometricalshapes,differentmaterials

9th	19	SESSIONAL-II
	20	SculptureMaking Thermocole(Styropor)
10th	21	MountBoard/sunboard/ Balsawoodstrips
	22	Claymodeling
11th	23	Makingmodel/Sculpturematerialssuchascopperwire,ceramicsmisc.materialslikeleather
	24	BrickMasonry, Layingofbricksindifferentbonds
12th	25	PaintingandPolishing
	26	Introductiontopaintingtools,equipment
13th	27	Preparationofdifferentcolors
	28	Surfacepreparationbeforepainting(steel),
14th	29	PaintingSteelItems
	30	Spray Paintingmetalitems
15th	31	Surfacepreparationbeforepainting(wood),Paintingwooden,SprayPaintingwooden
	32	Surfacepreparationbeforepolishing(wood)SprayPaintingwooden
16th	33	SESSIONAL-III

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 THE FACULTY : DAVYA RATHI
DISIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 3rd
SUBJECT : BMC-II
LESSION PLAN DURATION : 15
WEEKS WORK LOAD PER WEEK : 02TH + 04P

Week	Practical	
	Lecture Day	**Topic**
1ST	1	Lime & Cement - Uses and classification of lime Setting action of fat lime and hydraulic lime and Storing of lime
	2	Joinery (1 sheets) • Doors and windows frames – their fixing
2ND	3	Types of cement, their properties and uses
	4	Joinery (1 sheets) • Doors and windows frames – their fixing
3ND	5	Composition of portland cement Setting and hardening of cement and storage of cement
	6	Joinery - Doors and windows frames – their fixing
4TH	7	Aggregates & Mortar -Types and uses of Coarse Aggregates and Fine Aggregates Different types of sand and other Puzzolona material
	8	Panel Door, Flush Door (1 sheets)
5TH	9	Functions, uses of Mortar and its proportion for different building works Preparation of cement mortar, lime mortar, lime cement mortar and their uses.
	10	SESSIONAL TEST-I
6TH	11	Concrete - Definition of concrete, workability of concrete, Water - Cement Ratio
	12	Panel Door, Flush Door (1 sheets)
7TH	13	Compaction and Curing of concrete Properties & necessity of Reinforced cement concrete (RCC), M15, and M20
	14	
		Casement & Pivot Windows (1 sheets)
8TH	15	Timber - Characteristics and uses of common Indian timbers i.e. Sal, Deodar, Kali, Tali, Chir, and Teak etc. Characteristics of hard wood and soft wood.

	16	Casement & Pivot Windows (1 sheets)
9TH	17	Characteristics of good timber and Defects in timber. Different methods of seasoning and preservation / preservative materials of timber.
	18	Building hardware (sizes, applications) (1sheet) • Tower bolts • Hinges including concealed hinges • Door Handles • Door springs • Latches • Floor door stopper/floor springs and magnetic types stoppers • Fan light pivots • Mortice lock • Door closer – including hydraulic types • Ventilator chains • Wire gauze • Magnetic cupboard closers
10TH	19	Types of doors Types of windows
	20	**SESSIONSL TEST-II**
11TH	21	Types, thickness, uses, Availability and sizes of: • • • • • Sheet glass Wired glass Laminated safety glass
	22	Plastering and pointing (1 Sheet)
12TH	23	Plate glass Insulating glass
	24	False Ceiling, Paneling and Fibrous Board Finishes (1 Sheets)
13TH	25	Tinted glass • Heat absorbing glass. Glass blocks
	26	False Ceiling, Paneling and Fibrous Board Finishes (1Sheets)
14TH	27	Toughened glass • Structural glazing • Etched glass
	28	Market survey/collection of catalogues for study purpose.
15TH	29	Stained glass • Mirrors
	30	**SESSIONAL TEST-III**

LESSON PLAN

NAMEOF THEFACULTY : GURDEEP MALIK

DISCIPLINE :ARCHITECTURALASSISTANTSHIP

SEMESTER :3rd

SUBJECT :**HOA-I**

LESSON :15WEEKS

WORKLOADPER WEEK 04

Week	Theory	
	Lecture Day	**Topic**
1st	1	Introductionto HISTORYOFARCHITECTURE
	2	ImportanceofhistorytounderstandtheArchitecture
	3	ExamplesofEarlyshelters,StoneAge,Tumuli,etc.asexpressionofman'sphysicalandspiritualneeds.
	4	ExamplesofEarlyshelters,StoneAge,Tumuli,etc.asexpressionofman'sphysicalandspiritualneeds.
2nd	5	Determinantsofbuiltform–geophysical,societal,technologicaletc.
	6	(Earlycaves,timberhuts,stonehousesetc).
	7	WesternCivilization
	8	EgyptianCivilizationConceptoftheRoyalNecropolis
3rd	9	Locationalcontextandarchitecturalcharacteristicsofpublicbuildings
	10	e.g.Mastabas(masterofsakara)andpyramids(rock–cutandstructural) – oneexampleofeachtypetobechosen
	11	MesopotamianCivilization
	12	
4th	13	Theurbancontextandarchitectureofpublicbuildings(Ziggurats)-oneexample.
	14	GreekandRomanCivilizations
	15	GreekCivilization,Locationandcharacteristicsoftypicalcivicspacessuchas Agora, Acropolis,Stoa.
	16	SignificantcharacteristicsofGreekArchitecturesuchasMaterials,construction systems

5th	17	Systemofproportioning,Greekorders,architectureofGreektemples–Parthenon, Athens.
	18	RomanCivilization-SignificantcharacteristicsofRomanArchitecture.
	19	**SESSIONALTEST-1**
	20	Conceptofmonumentality,materialsandconstructionsystems,
6th	21	Romanorders,Colosseum
	22	Pantheon,Rome,theirform,andconstructional/structuralsystems.
	23	IndianCivilizationandBuddhistArchitectureinIndia
	24	
7th	25	IndusValleyCivilization:FormoftheHarappancity,
	26	locationandroleofpublicbuildings.
	27	Architectureofthetypical(Harappandwelling)
	28	
8th	29	GreatGranaryandGreatBath.
	30	TheVedicVillage,
	31	Buildingtypologyandconstruction.
	32	BuddhistArchitectureinIndiaBuildingtypology
9th	33	Stupas
	34	ChaityaHall
	35	Viharaoneexamplefromeach;constructionmethodsandornamentation
	36	TempleArchitectureinIndia
10th	37	Evolutionoftempleand its variousparts.
	38	Dravidianstyle(Southern)
	39	**SESSIONALTEST-2**
	40	Dravidianstyle(Southern)
11TH	41	Generalcharacteristics,
	42	Constructionmethodsandmaterial

	43	Constructionmethodsandmaterial
	44	(e.g.shoretempleatMahabalipuram,)
12th	45	architectural form, planning components, construction methods,materials,motifs
	46	IndoAryanTemple(NorthIndian)
	47	SunTempleKonark;
	48	Architecturalform,
13th	49	Planningcomponents,constructionmethods,materials,motifs
	50	LingarajaTempleatBhubhaneshwar
	51	Architecturalform,planningcomponents,
	52	Constructionmethods,materials,motifs
14th	53	KandariyaMahadeoatKhajuraho
	54	architecturalform,planningcomponents,
	55	Constructionmethods,materials,motifs
	56	JaintemplesinIndia
15th	57	Dilwaratemple,Mt.Abu
	58	Architecturalform,planningcomponents,
	59	Constructionmethods,materials,motifs
16th	60	**SESSIONALTEST-3**

LESSON PLAN

NAME OF THEFACULTY : SUNIL RAI
DISCIPLINE : ARCHITECTURALASSISTANTSHIP
SEMESTER : 3rd
SUBJECT : **CLIMATOLOGY**
LESSONPLANDURATION : 15WEEKS
WORK LOADPERWEEK : 03
SESSION : 2025-26

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

NAMEOFTHEFACULTY :GURDEEP
DISCIPLINE :ARCHITECTURALASSISTANTSHIP
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 incorporating allviews:planes,cones,cubes,cylinders,pyramidetc.Bird'seyeview,Normaleyeview, Wormseyeview
3RD	Geometricalshapesincorporatingallviews:planes, cones,cubes,cylinders,pyramidetc.Bird'seye view,Normaleye view,Wormseye view
4TH	TwopointperspectiveofsimplebuildingsuchasGuardroom,kiosketc
5TH	**IST SESSIONALTEST**
6TH	TwopointperspectiveofsimplebuildingsuchasGuardroom,kiosketc
7TH	**DrawingofOne-PointPerceptiveViews:**Geometricalshapesincorporatingallviews:planes,cones,cubes, cylinders,pyramidetc.
8TH	Onepoint perspectiveofagivenplanofkitchenand drawingroom.
9TH	**IntroductiontoSciography-inPlansandElevation**.Geometricalshapessuchas:planes,cones, cubes,cylinders, pyramidetc.
10TH	**2ND SESSIONALTEST**
11TH	Geometricalshapessuchas:planes,cones,cubes,cylinders,pyramidetc.
12TH	SciographyofsimplebuildingsuchasGuardroom,kiosketc.
13TH	**Introduction to Rendering:** Demo from teacher in different mediums - colourpencils, crayon, Colourwash. Markers etc.
14TH	Rendering Techniques in pen and ink,Differentcolourmediums.
15TH	Renderingofagivenperspectives
16TH	**3RDSESSIONAL TEST**

LESSON PLAN

NAME OF THE FACULTY : DIVYA RATHI
DISIPLINE : ARCHITECTURALASSISTANTSHIP
SEMESTER : 3rd
SUBJECT : BUILDING SERVICES

LESSIONPLANDURATION : 15
WEEKSWORKLOADPERWEEK : 03(L)

Week	THEORY	
	LECTURE Day	Topic
1ST	1	WaterSupply-Waterasanaturalresource,publichealthsignificanceofwater quality, demand of water for domestic, commercial, industrial andpublic utilitypurposesas per BISstandards.
	2	Percapitademand,leakageandwastageofwateranditspreventivemeasures
2nd	3	System of water supply – continuous, intermittent, their advantages anddisadvantages, Storage and Distribution of Water: Different methods ofwaterdistributionboostingwater,gravityandpressuredistributionby storagetanksofindividualbuildings
	4	Hot water supply for buildings including solar water heating, Serviceconnections,typesandsizesofpipes,watersupplyfixtureandinstallations, ConceptofRainwaterharvesting.
3rd	5	Drainage-Principlesofdrainage,surfacedrainage;combinedandseparate systemofdrainage,shapeandsizesofdrainsandsewers,stormwateroverflowchambers,methodsof layingandconstructionof sewers
	6	House drainage: traps – shapes, sizes, types, materials and function,Inspection chambers–sizes,andconstruction
4th	7	Ventilationofhousedrainage–anti-siphonageandventpipes,singlestackanddoublestacksystem,
	8	Functionsandworkingofsinks,washbasins,waterclosets,flushingcisterns,urinals,–sizes andtypes,Septic tanks,seepageandsoakpits
5th	9	Simple exercises on layout plans for toilet and kitchens for public andresidentialbuildingsincludingtheplacement,distancesandfixingdetails
	10	**SESSIONALTEST-I**
6th	11	LightingandElectricalFittings-Electricaldistribution-conduitsforwiring
	12	Types of wiring, types of switches, various terms used in lighting-illumination,Lux,lumenetc.distribution panels

7th	13	MCB'S,ELCBS,Methodsoflighting,qualityoflightofmercurylamps,incandescenttype sof lamps, fluorescenttubes
	14	CFLandotherlamps,thumbrulesforcalculationofilluminatinglevel,varioussystemsofwiring andtheirsustainability
8TH	15	Symbolic representation of electrical fittings for different work areas inresidentialbuilding(e.g.bedroom,livingroom,kitchen,studyandtoilet)
	16	Preparationofelectricallayoutofasimpleresidentialbuilding,Precautionstoavoidelectricala ccidents
9th	17	Heat,VentilationandAirConditioning(HVAC)-Behaviorofheatpropagation
	18	Thermalinsulatingmaterialsandtheirco-efficientofthermalconductivity
10th	19	Generalmethodsofthermalinsulation
	20	**SESSIONAL- II**
11th	21	Thermalinsulationofroofs,exposedwalls,Ventilation
	22	Definitionandnecessity,Systemofventilation(Mechanical)
12th	23	Essentialsofair-conditioningsystem,FireFightingServices-Causesoffire inBuildings
	24	Classificationofbuildingmaterialsaccordingtofirerating;firealarmsystems
13th	25	Introductiontofire-fightingsystem,precautionandcontrollingdevices(fire panels,doorandwindowsautomation,firehydrantsandsprinklers)
	26	Fireescapeelements(staircases,ramps,),provisionsinbuildingfromfiresafetyangle as perBIS
14th	27	heatdetectors,andfiredetectionsystem
	28	VerticalTransportationSystems-Classificationandtypesoflifts
15th	29	liftsizes,provisionandinstallation,escalators, sizes,safetynormstobeadopted
	30	**SESSIONAL-III**

LESSON PLAN

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

Week	Practical	
	Practical Day	Topic
1st	1	Introduction about design, Introduction about Small Housing Complex , 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 : DIVYA
DISCIPLINE : ARCHITECTURALASSISTANTSHIP
SEMESTER : 5th
SUBJECT : **BUILDING MATERIAL &CONSTRUCTION-IV**
LESSION PLAN DURATION : 15
WEEKSWORKLOADPERWEEK : 02T + 04P

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
16th	30.	Frame and Sealed Connections Built Up Steel Columns and Beams Beam to column seated connection
	31.	3RDSESSIONALTEST

LESSON PLAN

NAMEOFTHE FACULTY :Sh. GurdeepMalik

DISCIPLINE : ARCHITECTURALASSISTANTSHIP

SEMESTER :5th

SUBJECT : **ST. SYSTEM-I**

LESSONPLANDURATION :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
	30.	Shell Structures ,Truss Structures
16TH	31.	3RDSESSIONALTEST

LESSON PLAN

NAME OF THE FACULTY : Sh. PARDIP KUMAR MITTAL
DISIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 5th
SUBJECT : QUANTITY SURVEYING AND COSTING
LESSION PLAN DURATION : 15
WEEKS WORK 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	**Sessional Test-1**
5th	17 & 18	Rules for measurements
	19 & 20	Different methods of taking out quantities – centre line method
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	**Sessional Test-2**
	35 & 36	Running account bill
10th	37 & 28	Advance payment, secured advance payment
	39 & 40	Refund of security money
11th	41 & 12	Contractorship: Meaning of contract
	43 & 44	Contractorship: Qualities of a good contractor and their qualifications
12th	45 & 46	Contractorship: Essentials of a contract
	47 & 48	Contractorship: Types of contracts, their advantages, dis-advantages and suitability, system of payment
13th	49 & 50	Contractorship: 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 : GURDEEP MALIK
DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 5TH
SUBJECT : COMPUTER APPLICATIONS IN ARCHITECTURE - II
LESSON PLAN DURATION : 15 WEEKS
WORKLOAD (PERIODS PER WEEK) : 6

	PRACTICAL	
	PRACTICAL WEEK	**TOPIC**
	1	Preparation of working drawings using AutoCAD for the Minor Project work of 4th Semester
	2	Site Plan, Foundation layout plan & sectional details.
	3	Ground Floor Plan , Upper Floor Plans (one for each floor)
	4	Terrace Plan with rainwater drainage and disposal details
	5	SESSIONAL TEST-1
	6	Built-in furniture design: Plans, elevations, and sections of various fitting details
	7	Built-in furniture design: Plans, elevations, and sections of various fitting details
	8	Entrance gate, boundary wall, and railing details
	9	Entrance gate, boundary wall, and railing details

	10	SESSIONAL TEST-2
	11	Electrical layout plan
	12	Electrical layout plan
	13	Water supply, sewage & drainage layout plan.
	14	Water supply, sewage & drainage layout plan.
	15	SESSIONAL TEST-3

LESSON PLAN

NAME OF FACULTY : SUNILRAI
DISCIPLINE : ARCHITECTURALASSISTANTSHIP
SEMESTER : 5th
SUBJECT : LANDSCAPE DESIGN(ELECTIVE-I)
LESSONPLANDURATION : 15
WEEKSWORKLOAD(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