LESSON PLAN

NAME OF FACULTY : SEREBDEEP KAUR

DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 6th

SUBJECT : LANDSCAPE DESIGN (ELECTIVE-I)

LESSON PLAN DURATION : 15 WEEKS

WORK LOAD (LECTURE/PRACTICAL) : 3 PERIODS

PER 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**

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LESSON PLAN

NAME OF THE FACULTY : SUNIL RAI

DISIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 6th

SUBJECT : ENTREPRENEURSHIP DEVELOPMENT AND MANAGEMENT

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 03

Week	Theory	
	Lecture Day	**Topic**
1ST	**1**	Concept of Entrepreneurship
	2	Meaning of Entrepreneurship
	3	Need of Entrepreneurship
2ND	**4**	Qualities of Entrepreneur
	5	Functions of Entrepreneur
	6	Barriers inv Eentrepreneurship
3RD	**7**	Sole proprietorship of business organisations
	8	Partnership forms of business organisations
	9	Schemes of assistance by entrepreneurial support agencies at National, State, District –level, organisation: NSIC, NRDC,
4TH	**10**	DC, MSME, SIDBI, NABARD,
	11	Commercial Banks, SFC's TCO
	12	KVIB, DIC
5TH	**13**	Technology Business Incubators (TBI)
	14	Science and Technology Entrepreneur Parks
	15	**SESSIONAL TEST-1**
6TH	**16**	Market Survey and Opportunity Identification * Scanning of the business environment
	17	Salient features of National

	18	State industrial policies for business environment
7TH	**19**	Types of market survey
	20	Conduct of market survey
	21	Assessment of demand in potential areas of growth
8TH	**22**	Assessment of Supply in potential areas of growth
	23	Identifying business opportunity
	24	Considerations in product selection
9TH	**25**	Project report Preparation Preliminary project report
	26	How to prepare Project report
	27	Detailed project report including technical
10TH	**28**	Detailed project report including economic
	29	Detailed project report including market feasibility
	30	**SESSIONAL TEST-2**
11TH	**31**	Common errors in project report preparations
	32	Exercises on preparation of project report
	33	Definitions and importance of management Functions of management: Importance and process of planning, organising, staffing, directing and controlling
12TH	**34**	Principles of management (Henri Fayol, F.W. Taylor)
	35	Concept and structure of an organisation
	36	Types of industrial organisations a) Line organisation b) Line and staff organisation c) Functional Organisation
13TH	**37**	Leadership and Motivation a) Leadership

		· · Definition and Need · · Qualities and functions of a leader · · Manager Vs leader · · Types of leadership
	38	b) Motivation · · Definitions and characteristics · · Factors affecting motivation · · Theories of motivation (Maslow, Herzberg, Douglas, McGregor)
	39	Management Scope in Different Areas a) Human Resource Management · · Introduction and objective · · Introduction to Man power planning, recruitment and selection · · Introduction to performance appraisal methods b) Material and Store Management · · Introduction functions, and objectives · · ABC Analysis and EOQ
14TH	**40**	c) Marketing and sales · · Introduction, importance, and its functions · · Physical distribution · · Introduction to promotion mix · · Sales promotion
	41	d) Financial Management · Introductions, importance and its functions · Elementary knowledge of income tax, sales tax, excise duty, custom duty and VAT1
	42	Miscellaneous Topics a) Customer Relation Management (CRM) · · Definition and need · · Types of CRM
15TH	**43**	b) Total Quality Management (TQM) · · Statistical process control · · Total employees Involvement · · Just in time (JIT)
	44	c) Intellectual Property Right (IPR) · · Introductions, definition and its importance · · Infringement related to patents, copy right, trade mark
	45	**SESSIONAL TEST-3**

LESSON PLAN

NAME OF THE FACULTY : PARDIP KUMAR MITTAL

DISIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 6th

SUBJECT : QUANTITY SURVEYING AND VALUATION

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 05

Week	Theory	
	Lecture Day	**Topic**
1ST	**1**	Introduction to quantity surveying and its importance.
	2	Duties of quantity surveyor
	3	Types of estimates · Preliminary estimates - Plinth area estimate
	4	- Cubic rate estimate - Estimate per unit base
	5	Detailed estimates - Definition
2ND	**6**	- Stages of preparation – details of measurement and calculation of quantities and abstract
	7	Measurement Units of measurement for various items of work as per BIS:1200
	8	Rules for measurements
	9	Different methods of taking out quantities – centre line method
	10	Different methods of taking out quantities – short wall and long wall method
3RD	**11**	Preparation of Detailed and Abstract Estimates from Drawings A small residential building with a flat roof
	12	Temporary shelters
	13	Temporary sheds
	14	Water supply lines for a house
	15	Sanitary supply fittings
4TH	**16**	Water supply fittings

	17	Septic tank for a domestic building
	18	Explain Roads/streets network of group housing project
	19	Explain Roads/streets network of group housing project RCC work in footing
	20	**SESSIONAL TEST-1**
5TH	**21**	Roads/streets network of group housing project RCC work in beams
	22	Roads/streets network of group housing project RCC work in slab
	23	Roads/streets network of group housing project RCC work in column
	24	Roads/streets network of group housing project RCC work in lintel
	25	Calculation of quantities of materials from working drawings Cement mortars of different proportion
6TH	**26**	Cement concrete of different proportion
	27	Brick masonry in cement mortar
	28	Plastering and pointing
	29	Painting and polishing
	30	Steel reinforcement of RCC elements – Beam
7TH	**31**	Steel reinforcement of RCC elements _ Lintels
	32	Steel reinforcement of RCC elements – Slab
	33	Steel reinforcement of RCC elements – Column
	34	Analysis of Rates Steps involved in the analysis of rates. Requirement of material
	35	Steps involved in the analysis of rates. - labour
8TH	**36**	Steps involved in the analysis of rates. - Sundrie
	37	Steps involved in the analysis of rates - contractor's profit and overheads
	38	Analysis of rates for finished items when data regarding labour, rates of material and labour is given: - Earthwork in excavation hard.
	39	Analysis of rates for finished items when data regarding labour, rates of material and labour is given: - Ordinary soil and filling with a concept of lead and lift
	40	Analysis of rates for finished items when data regarding labour, rates of material and labour is given:

		- Cement concrete in foundation
9TH	**41**	**SESSIONAL TEST-2**
	42	Analysis of rates for finished items when data regarding labour, rates of material and labour is given: - RCC in roof slab
	43	Analysis of rates for finished items when data regarding labour, rates of material and labour is given: - Brick masonry in cement mortar
	44	Analysis of rates for finished items when data regarding labour, rates of material and labour is given: - Cement Plaster
	45	Analysis of rates for finished items when data regarding labour, rates of material and labour is given: - Painting and polishing
10TH	**46**	Running and maintenance cost of construction equipment 7 Measurement Book and Billing Entries in measurement book
	47	Standard measurement book
	48	Checking of measurement
	49	Preparation of bill
	50	First and final bill
11TH	**51**	Running account bill
	52	Advance payment, secured advance payment
	53	Refund of security money
	54	Valuation Purpose of valuation, principles of valuation
	55	Valuation Definition of various terms related to valuation like – depreciation, sinking fund
12TH	**56**	Salvage and scrap value
	57	Market value, fair rent, year's purchase etc
	58	Methods of valuation - Replacement cost method
	59	Methods of valuation - Rental return method
	60	. Contractorship - Meaning of contract
13TH	**61**	. Contractorship - Qualities of a good contractor and their qualifications

	62	. Contractorship - Essentials of a contract
	63	. Contractorship - Types of contracts, their advantages, dis-advantages and suitability, system of payment
	64	. Contractorship - Single and two cover-bids; tender, tender forms and documents, tender notice,
	65	Submission of tender and deposit of earnest money, security deposit, retention money, maintenance period
14TH	**66**	Preparation of Tender Document based on Common Schedule Rates (CSR) - Introduction to CSR and calculation of cost based on premium on CSR Specifications
	67	General and detailed specifications of : Single storey buildings
	68	Double storey buildings
	69	General specification 1st, 2nd, 3rd and 4th class buildings Exercises on writing detailed specifications of different types of building works from excavation to foundations, superstructure and finishing operation
	70	- Exercises on preparing tender documents for the following : a) Earth work
15TH	**71**	b) Construction of a small house as per given drawing c) RCC works
	72	d) Pointing, plastering and flooring e) White-washing, distempering and painting
	73	f) Wood work including polishing g) Sanitary and water supply installations
	74	h) False ceiling, aluminum (glazed) partitioning i) Tile flooring including base course
	75	**SESSIONAL TEST-3**

LESSON PLAN

NAME OF THE FACULTY : SUNIL RAI

DISIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 6th

SUBJECT : INTERIOR DESIGN (ELECTIVE-II)

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 03

Week	Practical	
	Practical Day	**Topic**
1ST	**1**	Introduction to interior design and its scope, general awareness to the subject and discussion.
	2	Principal of interior design, Function spaces, Durability of various elements, aesthetics, economy.
	3	Minimum dimensions for various functions with respect to Human Body's action
2ND	**4**	Planning for interior decoration, factors effecting the interior decoration, Functionalism and comfort, aesthetics and elements of aesthetics(Point, Line)
	5	Form, Texture, Proportion, Rhythm, Balance, background, colour, landscape, composition, circulation as elements of interior design.
	6	Colour and its role in interior decoration, elements of colour, psychological impact of colour, Basic principal of colour decoration, colour schemes.
3RD	**7**	Landscape on interior decoration, various types of plans for indoor decoration, containers and artificial plants and flowers.
	8	Storage spaces in interiors. (Kitchen, Bedrooms, Living rooms, Storage in term of wall units)
	9	Light as an element of interior duration different types of lighting fixtures(sketches)
4TH	**10**	Material and surfaces(wall finishes, floor covering materials, curtains and upholstery) materials for furniture.
	11	Site for visit for market survey of materials available in (Home alignment in form of report/ materials collector)
	12	Site for visit for market survey of materials available in (Home alignment in form of report/ materials collector)
5TH	**13**	Site for visit for market survey of materials available in (Home alignment in form of report/ materials collector)

	14	Space Analysis of living room, Dining & Kitchens
	15	Sheet No. 1
6TH	**16**	**SESSIONAL TEST-1**
	17	Sheet No. 2 Space Analysis of Bedrooms, Children Bedrooms , Toilets
	18	Sheet No. 3 Space Analysis of restaurants
7TH	**19**	Sheet No. 4 Space Analysis of Offices Lobbies
	20	Sheet No. 4 Space Analysis of Offices Lobbies
	21	Sheet No. 5 Space Analysis of Shops
8TH	**22**	Site visit for ease study of restaurant / Fast Food(On site sketches to be made / photographs)
	23	Site visit for ease study of restaurant / Fast Food(On site sketches to be made / photographs)
	24	Site visit for ease study of restaurant / Fast Food(On site sketches to be made / photographs)
9TH	**25**	Report making of case study
	26	Report making of case study
	27	Report making of case study
10TH	**28**	**SESSIONAL TEST-2**
	29	Sheet No. 6 Detail of furniture & storage
	30	Sheet No. 6 Detail of furniture & storage
11TH	**31**	Sheet No. 6 Detail of furniture & storage
	32	Sheet No. 7, 8 & 9 Detail of partition, falceiling and paneling
	33	Sheet No. 7, 8 & 9 Detail of partition, falceiling and paneling
12TH	**34**	Sheet No. 7, 8 & 9 Detail of partition, falceiling and paneling
	35	Sheet No. 7, 8 & 9 Detail of partition, falceiling and paneling
	36	Sheet No. 7, 8 & 9 Detail of partition, falceiling and paneling
13TH	**37**	Electrical layout in interiors

	38	Electrical layout in interiors
	39	Project work of restaurants (Detailed plan showing furniture, Indoor plants)
14TH	**40**	Furniture layout, Sectional elvations showing wall treatment (colour schemes)
	41	Furniture layout, Sectional elvations showing wall treatment (colour schemes)
	42	Furniture layout, Sectional elvations showing wall treatment (colour schemes)
15TH	**43**	One point percepective
	44	Details of furniture, storage, Partition, False ceiling.
	45	**SESSIONAL TEST-3**

LESSON PLAN

NAME OF THE FACULTY : SEREBDEEP KAUR,SUNIL RAI,

DISIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 6th

SUBJECT : PORTFOLIO (MAJOR PROJECT) & PROFESSIONAL TRAINING

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 19

WEEK	PRACTICAL	
	PRACTICAL DAY	**TOPIC**
1ST	1	Introduction about various topics. Group Formation. Synopsis from the individual group.
2nd	2	Library study. Visit to Library
3RD	3	Collect effective data. Consolidate report of library study. Checking of library study of individual group.
4TH	4	Site visit. Allotment of letter for Site visit.
5TH	5	Site visit report submission. Report checking.
6TH	6	Define Concept
7TH	7	Final Report submission
8TH	8	Rough floor plan and Site Plan Final floor plan
9TH	9	Rough elevation submission Final elevation submission
10TH	10	Final Floor Plans
11TH	11	Elevations & Sections
12TH	12	Working Drawings
13TH	13	Presentation Drawings
14TH	14	Model preparation
15TH	15	Model submission

NAME OF THE FACULTY : **SH.RAJESH KUMAR**

DISIPLINE : **ARCHITECTURAL ASSISTANTSHIP**

SEMESTER : **4TH SEM**

SUBJECT : **BUILDING MATERIALS AND CONTRUCTION TECHNOLOGY–III**

LESSION PLAN DURATION : **15 WEEKS**

WORK LOAD PER WEEK : **02(T) + 04 (P)**

Week	Theory /Practical	
	Lecture Day	**Topic**
1ST	**Theory**	**Plastics :**
		Natural (Shellac, casein and cellulose) and synthetic plastics Thermosetting and thermoplastics and their uses ,
		Plastics used as materials in building, industry e.g. flooring, roofing, wall panelling, pipes, doors etc
	Practical	**Flooring :**
		Types of flooring and constituents (ground and

		upper flooring)
		Different types of floor finishes (Sheet no 1)
2ND	**Theory**	**Plastics :**
		Plastics used as materials in building, industry e.g. wall panelling, pipes, doors etc
		Polymers – carbon fiber, polymer concrete, polycarbonate sheet etc.
	Practical	**Flooring :**
		Types of flooring and constituents (ground and upper flooring)
		Different types of floor finishes (Sheet no 2)
3RD	**Theory**	**Alloys and Metals :**
		Ferrous and non-ferrous metals (Aluminum, copper, lead, zinc, tin etc) their uses and applications in buildings
	Practical	**Door And Window:**
		Drawing of aluminum door showing fixing,

		beading, hardware's etc. Drawing of sliding doors (Sheet no 3)
4TH	**Theory**	**Paints and Varnishes**, Drying Oil, Pigment, Drier, Adhesives Synthetic resins (their trade names, uses of synthetic resins, costs, application in various situations as compared to traditional materials and methods .
	Practical	**Door And Window :** Drawing of aluminum window showing fixing, beading, hardware's etc Drawing of revolving doors (Sheet no 4
5TH	**Theory**	Thinner, Adhesives Synthetic resins (their trade names, uses of synthetic resins, costs, application in various situations as compared to traditional materials and methods .

	Practical	**SESSIONAL Ist**
6TH	**Theory**	Packing sizes, rates, brands, performance guarantees as given by the manufacturer and collection of catalogues and their covering capacity, uses and availability of paints and Varnishes .
		Water based paints, Distempers, Oil based paints and emulsions.
	Practical	Drawing a dog leg wooden staircase.(Sheet no 5)
7TH	**Theory**	Packing sizes, rates, brands, performance guarantees as given by the manufacturer and collection of catalogues and their covering capacity, uses and availability of paints and Varnishes . Cement paints ,Acrylic emulsions, Melamine finishes
	Practical	
		Drawing a dog leg wooden staircase.(Sheet no 5)

8TH	**Theory**	Packing sizes, rates, brands, performance guarantees as given by the manufacturer and collection of catalogues and their covering capacity, uses and availability of paints and varnishes.
		Varnishes, Spirit polish, wax polish,Lacquers, Stucco, Tar and Bitumen paint ,Glazing putty
	Practical	Steel spiral staircase. (Sheet no 6)
9TH	**Theory**	Floor Finishes (Laying sizes, availability, popular brand names, quality of polish, uses and current market rates)
		Terrazzo Tiles and Flooring
		Glazed terracotta and ceramic tiles
		Cement Concrete Tile
	Practical	RCC staircase cast-in-situ and also precast. (Sheet no 7)
10TH	**Theory**	Floor Finishes (Laying sizes, availability, popular brand names, quality of polish, uses

		and current market rates)
		Marble stone, Kota stone, slate, red sand stone, granite – their tiles and slabs
	Practical	**SESSIONAL-II**
11TH		Floor Finishes (Laying sizes, availability, popular brand names, quality of polish, uses and current market rates)
	Theory	Parquet (Wooden)
		Linoleum tiles and rolls
	Practical	Expansion joint in walls and roof, framed structure (Sheet no 8)
12TH	**Theory**	Floor Finishes (Laying sizes, availability, popular brand names, quality of polish, uses and current market rates)
		PVC
		Heavy duty flooring for industrial building
	Practical	Expansion joint in walls and roof, framed structure (Sheet no 8)

13TH	**Theory**	Exterior & Interior Wall Finishes (along with application method)
		▪ Wall board homogeneous
		▪ Laminated fiber boards – types
		▪ Plastic wall tiles – tiles available
	Practical	Expansion joint in walls and roof, framed structure (Sheet no 9)
14TH	**Theory**	Exterior & Interior Wall Finishes (along with application method)
		Wall papers ,Cork sheets and tiles ,Thermocol
	Practical	Expansion joint in walls and roof, framed structure (Sheet no 9)
15TH	**Theory**	Exterior & Interior Wall Finishes (along with application method)
		▪ Foam rubber tiles and rolls
		▪ Textured paint finishes
		▪ Exterior wall finishes
	Practical	SESSIONAL III

LESSON PLAN

NAMEOFTHEFACULTY	:	GURDEEP MALIK
DISIPLINE	:	ARCHITECTURALASSISTANTSHIP
YEAR/SEM	:	4TH SEM
SUBJECT	:	**MINOR PROJECT**
LESSIONPLANDURATION	15WEEKS	
WORKLOADPER WEEK	:	8

WEEK	PRACTICAL	
	LECTURE DAY	TOPIC
1ST	1	Introduction about design, Introduction about Health center, Framing of Requirement, Inter- relation of various spaces and circulation pattern.
	2	Site visit to Health center 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 visit 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	Completion of all floor plans with furniture layout & rendership, Elevation section and view
	10	SESSIONAL TEST-1

6TH	11	Completion of set of plans, elevations, view with full rendering
	12	Viva- Voce and checking of Health Centre Project
	13	Viva- Voce and checking of Health Centre Project
	14	Site Visit to Shopping Complex
7TH	15	Test of Shopping Complex
	16	Test of continued
8TH	17	Viva- Voce of Shopping Complex Drawings
	18	Introduction about nursery school project framing of requirements, inter- relation of spaces and circulation pattern.
9TH	19	Site visit to nursery school to study the planning, inter relationship of spaces, various areas, circulation pattern, landscape designing, furniture detailing, light, ventilation etc.
	20	Report marking of Nursery school visited in previous week. Discussion and finalization of rough plan
		Preliminary design started with conceptual plan.
10TH	21	2nd SESSIONAL TEST
	22	Discussion and finalization of rough plan.
11TH	23	Preparation of ground floor plan, site plan.
	24	Completion of plans with furniture layout and rendering
12TH	25	Preparation of elevation, sections and view
	26	Completion of set of all nursery school drawings with full rendering.
13TH	27	Viva- Voce Exam
	28	Viva- Voce and checking of Drawings

14TH	29	Completion of all pending works / drawings
	30	Completion of all pending works / drawings
15TH	31	Completion of all pending works / drawings
	32	SESSIONAL-III

NAMEOFTHEFACULTY : GURDEEP MALIK
DISIPLINE : ARCHITECTURAL ASSISTANTSHIP
YEAR/SEM : 4th SEM
SUBJECT **:BUILDING BYE LAWS AND MUNCIPAL DRAWING**
LESSIONPLANDURATION 15WEEKS
WORKLOADPERWEEK : 3

Week	Theory	
	Lecture Day	**Topic**
1ST	1	Introductionofbuildingbyelaws
	2	Needofbuildingbye-lawsforurbandevelopment.
	3	BasicTerminologyofbuildingbye-laws
2nd	4	Factorsaffectingplanningofbye-laws
	5	Lightandventilation
	6	Mass
3rd	7	Volume
	8	Openspace
	9	Skyline
4th	10	Setbacks.
	11	Parking andFireSafety
	12	FloorAreaRatio
5th	13	Floorspaceindex
	14	Byelaws
	15	**SESSIONALTEST-1**
6th	16	StudyBuildingBye-laws

	17	StudyBuildingBye-lawsoflocaldevelopmentauthorities/municipalities
	18	IntroductiontoNationalBuildingCode.
7th	19	Zoning
	20	Conceptofzoning
	21	Objectivesofzoning
8TH	22	TypesofzoningOFresidential
	23	TypesofzoningOFcommercialbuilding
	24	TypesofzoningOFotherbuilding
9TH	25	TypesofzoningOFotherbuilding
	26	CaseStudyofexistingresidentialwith respectto
		implementationoflocalByelaws
	27	CaseStudyofcommercialbuildingwithrespectto
		implementationoflocalByelaws
10TH	28	CaseStudyofexistingresidentialwith respectto
		implementationoflocalByelaws
	29	CaseStudyofcommercialbuildingwith respectto
		implementationoflocalByelaws
	30	**SESSIONALTEST-2**
11TH	31	Requirements for submission (Municipal) drawings]- sub division/ layout plan, key plan, Site plan
	32	Services plans, specifications, Structural stability Certificate, Scale, & coloring
	33	Introduction toDuration of sanction; Deviations, Violations and Penalties, Completion Certificate, Qualification
12TH	34	Barriersforpersonswithdisabilities(PWDs)
	35	Introduction toseismiczoning
	36	Introductionto compounding
13TH	37	Introductiontoseismic&earthquake
	38	resistantregulations
	39	Codeprovisions(IS-1893)
14TH	40	seismiczoning
	41	Preparationofonesetofmunicipaldrawingofaresidential
		buildingalready
	42	Preparationofonesetofmunicipaldrawingofacommercial
		already
15TH	43	DesignedinA.D.showingallservicesalongwithperformas.

	44	DesignedinA.D.showingallservicesalong withperformas.
	45	**SESSIONALTEST-3**

LESSON PLAN

NAME OF THE FACULTY : SEREBDEEP KAUR

DISCIPLINE : ARCH. ASSISTANTSHIP

SEMESTER : 4th

SUBJECT : HISTORY OF ARCHITECTURE – II

LESSON PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 03

WEEK	LECTURE DAY	THEORY TOPIC
1ST	1.	Early Christian Architecture
	2.	Early Christian Architecture: Development of church plan (Basilican)
	3.	Early Christian Architecture: Construction methods
	4	General Architectural characteristics. (St. Peters. Rome)
2ND	5	Romanesque Architecture: General architectural characteristics
	6	Romanesque Architecture:planning,geographical conditions.
	7	Romanesque Architecture: materials . (e.g. pisa group of buildings)
	8	Romanesque Architecture:construction methods. (e.g. pisa group of buildings)
3RD	9	Gothic Architecture
	10	Gothic Architecture: Main visual of Gothic arch.
	11	Gothic Architecture: construction vocabulary of Gothic arch.
	12	Gothic Architecture: construction vocabulary of Gothic arch.
4TH	13	(E.g. Notre Dame Paris Reims Cathedral)

	14.	Introduction of Islam in India.
	15	Islam in India – New building types
	16	Islam in India structural system
5TH	17	Islamic architecture-Qutub complex
	18	Islam in India- Structural system and ornamentation (Qutub Minar)
	19	Islam in India- Structural system and ornamentation (Qutub Minar)

	19	IST SESSIONAL TEST
	20	1 ST SESSIONAL TEST
6TH	21	Islam in India- Structural system and ornamentation (Jami Masjid)
	22.	Islam in India- Structural system and ornamentation (Jami Masjid)
	23	Islam in India- Structural system and ornamentation (Iron pillar)
	24	Islam in India- Structural system and ornamentation (Iron pillar)
7TH	25	Islam in India- Structural system and ornamentation (Alai Darwaza)
	26	Islam in India- Structural system and ornamentation (Alai Darwaza)
	27	Provincial styles – Jaunpur (Jama Masjid) planning principals
	28	Provincial styles – Jaunpur (Jama Masjid)Construction methods/ materials
8TH	29.	Provincial styles – Bijapur (Gol Gumbaz) planning principals
	30.	Provincial styles – Bijapur (Gol Gumbaz) Construction methods/ materials
	31.	Mughal Architecture- General architectural characteristics to understand architectural vocabulary.
	32	Mughal Architecture- General architectural- Planning principles in (Humayun Tomb)
9TH	33	Mughal Architecture- General architectural- construction methods in (Humayun Tomb)
	34.	Mughal Architecture- General architectural- Garden planning in (Humayun Tomb)
	35	Mughal Architecture- General architectural- Planning principles in (Red Fort)
	36	Mughal Architecture- General architectural- construction methods in (Red Fort)
10TH	37	Mughal Architecture- General architectural- Planning principles in (Fatehpur Sikri)
	38	Mughal Architecture- General architectural- construction methods in (Fatehpur Sikri)
	39.	Mughal Architecture- General architectural- Planning principles in (Taj Mahal at Agra)
	40	2ND SESSIONAL TEST
11TH	41.	Mughal Architecture- General architectural- construction methods in (Taj Mahal at Agra)
	42.	Mughal Architecture- General architectural- Garden planning in (Taj Mahal at Agra)
	43.	Mughal Architecture- General architectural- Planning principles in (Jama Masjid Delhi)

	44	Mughal Architecture- General architectural- construction methods in (Jama Masjid Delhi)
12^{TH}	45.	Modern Architecture- Emergence of modern architecture in Europe
	46	Modern Architecture- Emergence of modern architecture social & technological.
	47	Aesthetic concerns of modern movement.
	48	Modern Architecture- New building materials (Concrete, steel and glass) and their architectural expression

13TH	49	Modern Architecture- Philosophy and key works of Walter Gropius
	50	Modern Architecture- Philosophy and key works of Frank Lloyd Wright
	51	Modern Architecture- Philosophy and key works of Mies Van De Rohe
	52	Contemporary/ Post Independence Architecture in India
14TH	53	Key works of Le Corbusier in India
	54	Planning of Chandigarh by Le Corbusier
	55	Key works of Charles Correa
	56	Key works of B.V Doshi
15TH	57	Key works of Joseph Allen stein
	58	Indian habitat centre,new delhi
	59	Key works of Raj Rewal
	60	3RD SESSIONAL TEST

LESSON PLAN

NAME OF THE FACULTY : RAJESH KUMAR

DISIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 4th

SUBJECT : STRUCTURE MECHANICS

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 05

Week	Theory	
	Lecture Day	**Topic**
1ST	**1**	Introduction of Structure mechanics.
	2	Force system and Equilibrium
	3	Force: Definition and its effect, characteristics.
	4	Force: Definition and its representation.
	5	Force: Definition and its types of forces
2ND	**6**	Force Systems: Coplanar force systems
	7	Force Systems: Non coplanar force systems
	8	Types of coplanar Forces: Collinear, Concurrent
	9	Types of coplanar Forces: Parallel, Non concurrent
	10	Types of coplanar Forces: Non concurrent and Non parallel.
3RD	**11**	Resultant force
	12	Resultant force and components of a force
	13	Laws of forces: Parallelogram
	14	Laws of forces: Triangle and polygon Laws of forces
	15	Laws of forces: polygon Laws of forces
4TH	**16**	Free Body Diagram
	17	Lamis theorem
	18	Calculation of resultant of coplanar force systems
	19	Concept of Moment, Characteristics of moment.

	20	Resultant moment, Varignon's theorem
5TH	**21**	Concept of couple, moment of a couple
	22	Equilibrium of rigid bodies
	23	Centroid and Moment of Inertia
	24	Definition of centre of Gravity and Centroid
	25	**SESSIONAL TEST - 1**
6TH	**26**	Centroid by method of moments of areas for square, rectangular, triangular cross- sections
	27	Centroid by method of moments of areas for L-shape, T-shape and I shape cross- sections
	28	Moments of Inertia by methods of moments and Radius of Gyration
	29	Parallel axis theorem
	30	Perpendicular Axis Theorem (no derivation)
7TH	**31**	Numerical on moment of inertia of Rectangular, Triangular and Circular
	32	Stress and Strain
	33	Elasticity, Elastic limit
	34	Definition of stress and strain
	35	Types of stress and strain
8TH	**36**	Stress strain curve for mild steel
	37	Hook's Law (Numerical)
	38	Shear Force and Bending Moment
	39	Types of loads- Dead load, Live load, snow, wind and seismic loads
	40	Types of loads- Wind and seismic loads
9TH	**41**	Types of loading: Point load, Uniformly distributed load
	42	Types of loading: uniformly varying load.
	43	Types of Beams: Simply supported, cantilever
	44	Types of Beams: Overhanging and continuous beams
	45	Types of Supports: Hinged, fixed supports.
10TH	**46**	Types of Supports: types of reactions provided by each type of support.
	47	Types of Beams: Simply supported, cantilever beams
	48	Types of Beams: overhanging and continuous beams
	49	Types of Beams: Simply supported, cantilever, overhanging and continuous beams
	50	**SESSIONAL TEST - 2**
11TH	**51**	Concept of bending moment
	52	Concept of shear force

	53	Bending moment and shear force diagrams for simply supported subjected to point loads
	54	Bending moment and shear force diagrams for cantilever subjected to point loads
	55	Bending moment and shear force diagrams over hanging beams subjected to point loads
12TH	**56**	Bending moment and shear force diagrams for simply supported subjected to uniformly distributed loads
	57	Bending moment and shear force diagrams for cantilever subjected to uniformly distributed loads
	58	Bending moment and shear force diagrams for overhanging beams subjected to uniformly distributed loads only
	59	Calculation of location and magnitude of Max Bending moment and point of contraflexure
	60	Calculation of location and magnitude of Max Bending moment
13TH	**61**	Calculation of point of contraflexure
	62	Bending stresses in Beams
	63	Introduction: Tension, compression
	64	Simple Bending and assumption of Simple Bending Theory.
	65	Position of Neutral Axis
14TH	**66**	Section Modulus.
	67	Moment of Resistance.
	68	Application of flexure equation (M/I = f/y = E/R)
	69	Maximum and permissible bending stresses
	70	Analysis of Perfect Frames
15TH	**71**	Types of pin jointed frames.
	72	Assumptions in computing the forces in members of a perfect frame.
	73	Analysis of perfect frames by method of joints.
	74	Analysis of perfect frames by method of joints.
	75	**SESSIONAL TEST - 3**

LESSON PLAN

NAME OF THE FACULTY : PARDIP KUMAR MITTAL

DISIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 4th

SUBJECT : BUILDING BYE LAWS

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 03

Week	Theory	
	Lecture Day	Topic
1ST	1	Introduction of building bye laws
	2	Need of building bye-laws for urban development.
	3	Basic Terminology of building bye-laws
2ND	4	Factors affecting planning of bye-laws
	5	Light and ventilation
	6	Mass
3RD	7	Volume
	8	Open space
	9	Skyline
4TH	10	Setbacks.
	11	Parking and Fire Safety
	12	Floor Area Ratio
5TH	13	Floor space index
	14	Bye laws
	15	**SESSIONAL TEST - 1**
6TH	16	Study Building Bye-laws
	17	Study Building Bye-laws of local development authorities
	18	Introduction to National Building Code.
7TH	19	Zoning
	20	Concept of zoning

	21	Objectives of zoning
8TH	**22**	Types of zoning OF residential
	23	Types of zoning OF commercial building
	24	Types of zoning OF other building
9TH	**25**	Types of zoning OF other building
	26	Case Study of existing residential with respect to implementation of local Bye laws
	27	Case Study of commercial building with respect to implementation of local Bye laws
10TH	**28**	Case Study of existing residential with respect to implementation of local Bye laws
	29	Case Study of commercial building with respect to implementation of local Bye laws
	30	**SESSIONAL TEST - 2**
11TH	**31**	Study of various Performas to be used
	32	BIS By-laws/standards for removing Architectural
	33	CPWD By-laws/standards for removing Architectural
12TH	**34**	Barriers for persons with disabilities (PWDs)
	35	Introduction to seismic zoning
	36	Introduction to earthquake
13TH	**37**	Introduction to seismic & earthquake
	38	resistant regulations
	39	Code provisions (IS-1893)
14TH	**40**	seismic zoning
	41	Preparation of one set of municipal drawing of a residential building already
	42	Preparation of one set of municipal drawing of a commercial already
15TH	**43**	Designed in A.D. showing all services along with performas.
	44	Designed in A.D. showing all services along with performas.
	45	**SESSIONAL TEST - 3**

LESSON PLAN

NAME OF THE FACULTY : PARDIP KUMAR MITTAL

DISIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 4th

SUBJECT : WORKING DRAWING - 1

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 06

WEE	PRACTICAL	
	PRACTICAL DAY	**TOPIC**
1ST	**1**	Introduction of working drawing.
	2	Preparation of working drawings for a simple single room.
2ND	**3**	Preparation of working drawings for a simple single storeyed residential building:
	4	Site Plan
3RD	**5**	Preparing site plan on a suitable scale
	6	Preparing site plan on a suitable scale with complete dimensionin
4TH	**7**	Showing plot area, covered/built-up portion within the site.
	8	Showing Approach road, side roads, adjoining buildings/features,
5TH	**9**	**SESSIONAL TEST-1**
	10	Showing boundary wall with gates layout plan
6TH	**11**	Showing sewage pipes, water supply pipes, rain-water pipes
	12	Preparation of foundation layout plan with benchmark
7TH	**13**	Preparation of section details of foundations for brick external wall

	14	Preparation of brick internal wall, brick partition wall.
8TH	**15**	Preparation of brick toe wall, brick boundary wall and R.C.C Column.
	16	Preparation of R.C.C Column.
9TH	**17**	Preparation of Ground Floor plan with dimensions
	18	Preparation of specifications of various building components, schedule of joinery i.e. doors, window ventilators etc.
10TH	**19**	Showing the layout of sewage pipes, water supply pipes, Rain water pipe.
	20	**SESSIONAL TEST-2**
11TH	**21**	Preparation of terrace plan with the rain water disposal details and overhead water tank (Tile Terrace/Gola/Coba etc)
	22	Preparation of terrace plan with the rain water disposal details and overhead water tank (Tile Terrace/Gola/Coba etc)
12TH	**23**	Cross and longitudinal sections representing relationship with plans and elevation showing all heights, specifications, cill/lintel details etc.
	24	Cross and longitudinal sections representing relationship with plans and elevation showing all heights, specifications, cill/lintel details etc.
13TH	**25**	Front and rear elevations showing all the levels on faced to relate it to plan and section
	26	Details of: -Toilet (Plan, Elevations as required)
14TH	**27**	Details of: - Sections as required Toilet with specifications and details
	28	Details of: - Kitchen (Plan, Elevations as required) with specifications and details
15TH	**29**	Details of: - Sections as required Kitchen with specifications and details
	30	**SESSIONAL TEST-3**

LESSON PLAN

NAME OF FACULTY	:	SUNIL RAI
DISCIPLINE	:	ARCHITECTURAL ASSISTANTSHIP
SEMESTER	:	4TH
SUBJECT	:	COMPUTER APPLICATIONS IN ARCHITECTURE - I
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 : SEREBDEEP KAUR

DISIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 4th

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

NAME OF THE FACULTY : RAJESH KUMAR
DISIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 2nd
SUBJECT : ARCHITECTURAL DRAWING -II
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK : 06

Week	Practical	
	Practical Day	**Topic**
1ST	**1**	Introduction about the subject.
	2	**Reviewing orthographic projections (1 sheet):**
	3	Reviewing orthographic projections (plans)
2ND	**4**	Reviewing orthographic projections (line projections)
	5	Reviewing orthographic projections (solids) (1 sheet)
	6	**Section of Solids(4 sheets):** Simple geometrical shapes e.g. cube: Elementary building sections highlighting line intensities for sectional components (Example: parapet,chajjas in section) (1 sheet)
3RD	**7**	Simple geometrical shapes e.g. cube: Elementary building sections highlighting line intensities for elevational components (Example: parapet,chajjas in section and elevation behind) (1 sheet)
	8	Simple geometrical shapes e.g. cube: Elementary building sections highlighting line intensities for sectional and elevational components(Example: parapet,chajjas in section and elevation behind) (1 sheet)
	9	Simple geometrical shapes e.g. cube: Elementary building sections highlighting line intensities for sectional and elevational components(Example: parapet,chajjas in section and elevation behind) (1 sheet)
4TH	**10**	**Development of surface of various geometrical shapes (1 sheets):** (Development with an aim to calculate areas)
	11	Development of surface (Development with an aim to calculate areas)
	12	Development of surface (Development with an aim to calculate areas)

5TH	13	Development of surface (Development with an aim to calculate areas)
	14	Development of surface (Development with an aim to calculate areas)
	15	**SESSIONAL TEST- 1**
6TH	16	**Isometric Views of various geometrical shapes (3 sheets):** Conversion of 2D geometrical shapes into 3D isometric views
	17	Conversion of 2D geometrical shapes into 3D isometric views (30o – 30o) to realize the potential of each from simple to complex solid to basic building
	18	Conversion of 2D geometrical shapes into 3D isometric views (30o – 30o) to realize the potential of each from simple to complex solid to basic building
7TH	19	Conversion of 2D geometrical shapes into 3D isometric views (30o – 30o) to realize the potential of each from simple to complex solid to basic building
	20	Conversion of 2D geometrical shapes into 3D isometric views (30o – 60o) to realize the potential of each from simple to complex solid to basic building
	21	Conversion of 2D geometrical shapes into 3D isometric views (30o – 60o) to realize the potential of each from simple to complex solid to basic building
8TH	22	Conversion of 2D geometrical shapes into 3D isometric views (30o – 60o) to realize the potential of each from simple to complex solid to basic building
	23	Conversion of 2D geometrical shapes into 3D isometric views (30o – 60o) to realize the potential of each from simple to complex solid to basic building
	24	Isometric Views (3 sheets) Conversion of 2D geometrical shapes into 3D isometric views (30o – 30o), 30o –60o) to realize the potential of each from simple to complex solid to basic building forms
9TH	25	Isometric Views (3 sheets) Conversion of 2D geometrical shapes into 3D isometric views (30o – 30o), 30o –60o) to realize the potential of each from simple to complex solid to basic building forms
	26	Isometric Views (3 sheets) Conversion of 2D geometrical shapes into 3D isometric views (30o – 30o), 30o –60o) to realize the potential of each from simple

		to complex solid to basic building forms
	27	Isometric Views (3 sheets) Conversion of 2D geometrical shapes into 3D isometric views (30o – 30o), 30o –60o) to realize the potential of each from simple to complex solid to basic building forms
10TH	**28**	Isometric Views (3 sheets) Conversion of 2D geometrical shapes into 3D isometric views (30o – 30o), 30o –60o) to realize the potential of each from simple to complex solid to basic building forms
	29	Isometric Views (3 sheets) Conversion of 2D geometrical shapes into 3D isometric views (30o – 30o), 30o –60o) to realize the potential of each from simple to complex solid to basic building forms
	30	**SESSIONAL TEST- 2**
11TH	**31**	**Axonometric Views(5 sheets):** Conversion of 2D geometrical shapes into 3D axonometric views at different angles (45o – 45o) to realize the potential of each from simple to complex solid to basic building forms
	32	Conversion of 2D geometrical shapes into 3D axonometric views at different angles (45o – 45o) to realize the potential of each from simple to complex solid to basic building forms
	33	Conversion of 2D geometrical shapes into 3D axonometric views at different angles (45o – 45o) to realize the potential of each from simple to complex solid to basic building forms
12TH	**34**	Conversion of 2D geometrical shapes into 3D axonometric views at different angles (45o – 45o) to realize the potential of each from simple to complex solid to basic building forms
	35	Conversion of 2D geometrical shapes into 3D axonometric views at different angles (45o – 45o) to realize the potential of each from simple to complex solid to basic building forms
	36	Conversion of 2D geometrical shapes into 3D axonometric views at different angles (45o – 45o) to realize the potential of each from simple to complex solid to basic building forms
13TH	**37**	Isometric/axonometric use of any building form, from a given base plan – to be developed as per the student's imagination of the exterior/interior components (with roads, landscape elements)
	38	Isometric/axonometric use of any building form, from a given base plan – to be developed as per the student's imagination of the exterior/interior components (with roads, landscape elements)

	39	Isometric/axonometric use of any building form, from a given base plan – to be developed as per the student's imagination of the exterior/interior components (with roads, landscape elements)
14TH	**40**	Isometric/axonometric use of any building form, from a given base plan – to be developed as per the student's imagination of the exterior/interior components (with roads, landscape elements)
	41	Isometric/axonometric use of any building form, from a given base plan – to be developed as per the student's imagination of the exterior/interior components (with roads, landscape elements)
	42	Isometric/axonometric use of any building form, from a given base plan – to be developed as per the student's imagination of the exterior/interior components (with roads, landscape elements)
15TH	**43**	Isometric/axonometric use of any building form, from a given base plan – to be developed as per the student's imagination of the exterior/interior components (with roads, landscape elements)
	44	Isometric/axonometric use of any building form, from a given base plan – to be developed as per the student's imagination of the exterior/interior components (with roads, landscape elements)
	45	**SESSIONAL TEST- 3**

LESSON PLAN

NAME OF THE FACULTY : SH. PARDIP K. MITTAL
DISIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 2nd
SUBJECT : BUILDING MATERIALS AND CONTRUCTION TECHNOLOGY –I
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK : 03(T) + 04 (P)

Week	Theory	
	Lecture Day	Topic
1ST	1.	Introduction to BUILDING MATERIALS
	2.	Building Stones
	3.	Classification of rocks
	4.	**Practical** Drawing of various types of stone masonry
2ND	5.	Characteristics and utility of good building stones
	6.	Testing -- Water absorption, Compressive strength and Durability test
	7.	Natural bed of stones, its effective and correct placement in building
	8.	**Practical** Drawing of various types of stone masonry
3RD	9.	Common building stones
	10.	Granite, Basalt and Trap, Sandstone, Lime stone, Slate, Marble
	11.	Their composition, Properties, uses and their origin
	12.	**Practical** Sketches of different type of stone facing
4TH	13.	Their transportation and storage Techniques
	14.	Selection of stones for different building works
	15.	Characteristics and classification of stone masonry
	16.	**Practical** Sketches of different type of stone facing
5TH	17.	Advantages and Disadvantages of different types of stones
	18.	Suitability to differentelements of building
	19.	SESSIONAL-I
	20.	**Practical** Drawing of different shapes and sizes of bricks

6TH	21.	Bricks
	22.	Sizes, classification and Composition of bricks
	23.	Properties and uses of first class and second class bricks, clay and burnt bricks
	24.	**Practical** Drawing of different shapes and sizes of bricks
7TH	25.	Characteristics of a good brick including size and weight of a standard brick
	26.	Test for burnt clay bricks -- Compressive strength, Water absorption & efflorescence
	27.	Fire bricks, its properties
	28.	**Practical** Drawing of different shapes and sizes of bricks
8TH	29.	Uses and availability.
	30.	Stretcher and header courses in various wall thickness,
	31.	T-junctions and Cross-junction in ½, 1 and 1 ½ thick brick wall
	32.	**Practical** Drawings of different bonds in different wall thickness, T-junctions, cross junction
9TH	33.	Different types of bonds - English, Flemish and Rat Trap Bond in different wall width
	34.	Advantages and Disadvantages of different Bonds
	35.	Advantages and Disadvantages of different types of bricks and their suitability to differentelements of building
	36.	**Practical** Foundation detail for brick pier and column foundation
10TH	37.	Foundation Different types of foundations (normal and eccentric)
	38.	Their advantage of one over other.
	39.	SESSIONAL-II
	40.	**Practical** Drawing of spread foundation, toe wall and verandah steps foundation
11TH	41.	Brief knowledge of different types of foundations in basements

	42.	Foundations for columns and verandah steps
	43.	Openings in Walls
	44.	**Practical** Reinforced brick work and jallies
12TH	**45.**	Classification of arches and lintels as per finish, shape and material
	46.	Brick jallies and reinforcement
	47.	Brick jallies in ½ and 1 thick brick wall in English and Flemish Bond
	48.	**Practical** Drawings of lintels and arches of various materials and various wall thickness
13TH	**49.**	SESSIONAL-II
	50.	Damp Proof Course
	51.	Explanation of DPC and reasons for its use.
	52.	**Practical** Demonstration Showing of Damp proof course in a horizontal and vertical brick wall
14TH	**53.**	Sources of dampness
	54.	Effects of dampness
	55.	Classification as per hardness of material
	56.	**Practical-7** Demonstration Showing of Damp proof course in a horizontal and vertical brick wall.
15TH	**57.**	BIS stipulations of damp proofing
	58.	**Practical-9** Application of DPC on spread foundation and basements
	59.	Treatment of Building component for effective damp proofing
	60.	SESSIONAL III

LESSON PLAN

NAME OF THE FACULTY : SH. RAJESH KUMAR
DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 2nd Sem

SUBJECT : SURVEYING

LESSON PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 03(T) +04(P) =07

WEEK	LECTUR EDAY	THEORY & PRACTICAL TOPIC
1ST	1.	**Introduction:**
	2.	Basic principles of surveying and types of surveying
	3.	Concept of surveying
2nd	4.	Purpose of surveying
	5.	Measurements-linear and angular, units of measurements
	6.	Instruments used for taking these measurement
3rd	7.	Classification of survey based on instruments
	8.	Compass surveying: Purpose of compass surveying,
	9.	Construction andworking of prismatic compass
4th	10.	Use of prismatic compass: Setting and taking observations
	11.	Practical Exercises of compass surveying
	12.	Concept of: (a) Meridian – Magnetic and true
5th	13.	b) Bearing - Magnetic, Trueand Arbitrary
	14.	Practical Exercises of compass surveying
	15.	SESSIONAL TEST-I

6th	16.	Whole circle bearing and reduced bearing Fore and back bearing
	17.	Local Attraction-causes, Detection & precautions against local attraction
	18.	Levelling: Purpose and concept of leveling, horizontal & vertical surface, datum, reduced level and bench marks
7th	19.	Various parts of Dumpy level & uses of dumpy level
	20.	Concepts of line of collimation, axis of the bubble tube, axis of thetelescope and vertical axis.
	21.	Auto level: advantage and disadvantage, use of auto level
8th	22.	Practical Exercises of leveling.
	23.	Temporary adjustment: permanent adjustment of dumpy level by two peg method.
	24.	Concept of back sight, foresight, intermediate sight.
9th	25.	Station change point, determines reduced levels.
	26.	Level book and reduction of levels by - Height of instrument method
	27.	Level book and reduction of levels by -Rise and fall method
10th	28.	Level book and reduction of levels by - Height of instrument method, Rise and fall method
	29.	Practical Exercises of leveling.
	30.	SESSIONAL TEST-II
11th	31.	Plane Table Surveying: Purpose of plane table surveying.
	32.	Equipment used in plane table survey
	33.	Plane table Surveying and its accessories
12th	34.	Equipment used in plane table survey
	35.	Plane table Surveying and its accessories

	36.	Setting of a plane table:(a) Centering (b) Leveling (c) Orientation
13th	37.	. Methods of plane table surveying Two Point Problem
	38.	(a) Radiation, (b) Intersection
	39.	(c)Traversing (d) Resection
14th	40.	Practical Exercises of Plane Table Surveying
	41.	Introduction of Digital Instruments:
	42.	Auto level and theodolite
15th	43.	Total station and EDM instruments
	44.	GPS and GI System
	45.	SESSIONAL TEST-III

LESSON PLAN

NAME OF THE FACULTY : SMT SEREBDEEP KAUR

DISIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 2ND

SUBJECT : THEORY OF DESIGN

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 03 (L) + 2 (P)

Theory & Practical	
	Topic
1ST	Introduction to Theory of Design. Study of Elements of Design such as Point, Line, Form, Space, Colour, Mass, Figure, Plane, Shape, Volume. Requirement of space (2-D) for various human activities (Single and multiple use of spaces such as queues etc.) (sketches to be made in sketchbook)
2ND	Study of Principles of Design such as Harmony, Balance, Proportion, Scale. Furniture standards (sizes of domestic and public furniture); Toilet and Kitchen equipment - sizes and standards (sketches to be made in sketchbook)
3RD	Study of Principles of Design such as Rhythm, Texture, Contrast, Monotony, Unity. Color chart showing primary, secondary and tertiary colors Study of a Guard Room w.r.t. spaces and layout of furniture for various activities. (sketches to be made in sketchbook)
4TH	Warm and cool colors, Receding and advancing colors, Psychological effects of colors Study of a Florist Kiosk w.r.t. spaces and layout of furniture for various activities. (sketches to be made in sketchbook)
5TH	SESSIONAL TEST-I
6TH	Study of a Gift/souvenir shop to be presented through plans, elevation, section, sketches etc.) (sketches to be made in sketchbook)
7TH	Study of a Milk Bar to be presented through plans, elevation, section, sketches etc.) (sketches to be made in sketchbook)
8TH	Design a Weekend Cottage (Drawings to be prepared: Site plan, Plans, Section, Elevations, Views, and Block Model etc.) (Sheet-1)
9TH	Design a WeekendCottage (Drawings to be prepared: Site plan, Plans, Section, Elevations, Views, and Block Model etc.) (Sheet-1)
10TH	SESSIONAL TEST -II
11TH	**Time Problem** Design a Café (Drawing required Plan showing furniture layout and section. (Sheet-1)

12TH	**Time Problem** Design a Traffic police kiosk (Drawing required Plan showing furniture layout and section. (Sheet-1)
13TH	**Time Problem** Design a Entrance gate of school (Drawing required Plan showing furniture layout and section.(Sheet-1)
14TH	**Time Problem** Design a Bus shelter (Drawing required Plan showing furniture layout and section(Sheet-1)
15TH	SESSIONAL TEST-III

LESSON PLAN

NAME OF THE FACULTY : SH.SUNIL RAI

DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 2nd Sem

SUBJECT : FUNDAMENTALS OF IT

LESSON PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 02(T) +04(P) =06

WEEK	LECTURE DAY	THEORY & PRACTICAL TOPIC
1st	1.	Basic of Computer Breif History of développent of computers and its définitions
	2.	Block diagram of a computer, , Hardware, Software, Booting: Cold and Hot Booting
	3.	Interaction between the CPUand Memory with Input/output devices, Function of CPU and major functional parts of CPU.
2nd	4.	Memory, Bit, Nibble, Byte, KB, MB, GB, TB, PB.
	5.	Functions of memory, Use of storage devicesin a Computer,
	6.	List types of memory used in a Computer.
3rd	7.	Importance of cache memory, CPU speed and CPU word length
	8.	Practical Exercises of Browser, Digital India portals.
	9.	Basic Internet Skills Understanding browser, Introduction to WWW, efficient use of search engines.
4th	10.	Awareness aboutDigital India portals (state and national portals) and college portals.
	11.	Advantages of Email, Various email service providers.

	12.	Creation of email id, sending and receiving emails, attaching documents with email and drive
5th	13.	Effective use of Gmail, G-Drive, Google Calendar, Google Sites, Google Sheets. Online mode ofcommunication using Google Meet & WebEx.
	14.	Practical Exercises of Read Wikipedia pages, Using Administrative Tools-Control Panel setting
	15.	SESSIONAL TEST-I
6th	16.	Basic Logic building Introduction to Programming, Steps involved in problem solving,
	17.	Definition of Flowchart, Steps involved in algorithm
	18.	Flowchart, symbols used in flowcharts, algorithms for simple problems, flowcharts for simple problems.
7th	19.	Practice logic building using flowchart/algorithms
	20.	Practical Exercises of printer, scanner, MS-Office
	21.	Office Tools Office Tools like Libre Office/Open Office/MSOffice.
8th	22.	Open Office Writer – Typesetting Text and Basic Formatting
	23.	Inserting Images, Hyperlinks,Bookmarks,.
	24.	Tables and Table Properties in Writer
9th	25.	Bookmarks, Tables and Table Properties in Writer
	26.	Introducing Libre Office/Open Office *Calc*,
	27.	Working with Cells, Sheets, data, tables.
	28.	Using formula and functions, using charts and graphics.

10th	29.	Practical Exercises of Conversion Software(PDf to World & World to PPT), Mobile Applications (Installation & Setting)
	30.	SESSIONAL TEST-II
11th	31.	Open Office Impress – Creating and Viewing Presentations.
	32.	Inserting Pictures and Tables,
	33.	SlideMaster and Slide Design.
12th	34.	Custom Animation
	35.	Use of Social Media
	36.	Introduction to Digital Marketing
13th	37.	Practical Exercises of Creating email id, Using Google drive, calendar
	38.	Characteristics of Digital Marketing
	39.	Tools for Digital Marketing
14th	40.	Effective use of Social Media like LinkedIn
	41.	Google+,Facebook, Twitter, etc
	42.	Features of Social media.
15th	43.	Practical Exercises of Create Flow chart and Algorithm
	44.	Advantages and Disadvantages of Social Media.
	45.	SESSIONAL TEST-III

LESSON PLAN

NAME OF THE FACULTY : SH. GURDEEP MALIK

DISIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 2ND

SUBJECT : ENVIRONMENTAL STUDIES AND DISASTER MANAGEMENT

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 02

Week	THEORY	
	LECTURE Day	Topic
1ST	1	Introduction of Environmental Studies
	2	Basics of ecology, eco system- concept, and sustainable development, Sources
2nd	3	Advantages, disadvantages of renewable and nonrenewable energy.
	4	Rain water harvesting, Deforestation – its effects & control measures
3rd	5	Air and Noise Pollution
	6	Air Pollution: Source of air pollution
4th	7	Effect of air pollution on human health, economy,
	8	Air pollution control methods:
5th	9	Noise Pollution Source of noise pollution, Unit of noise,
	10	Effect of noise pollution, Acceptable noise level, Effect of noise pollution, Acceptable noise level,
6th	11	Different method of minimizing noise pollution.
	12	SESSIONAL-I
7th	13	Water and Soil Pollution**,** Impurities in water, Cause of water pollution, Source of water pollution.
	14	Effect of water pollution on human health, Concept of DO, BOD, COD
8TH	15	Prevention of water pollution- Water treatment processes

	16	Sewage treatment. Water quality standard, Soil Pollution Sources of soil pollution,
9th	17	Effects and Control of soil pollution
	18	Types of Solid waste- House hold, Industrial, Agricultural, Biomedical, Disposal of solid waste, Solid waste management E-waste, E – waste management
10th	19	Impact of Energy Usage on Environment
	20	SESSIONAL II
11th	21	Global Warming, Green House Effect, Depletion of Ozone Layer, Acid Rain. Eco-friendly MATERIAL
	22	Recycling of Material, Concept of Green Buildings, Concept of Carbon Credit & Carbon footprint.
12th	23	Disaster Management Different Types of Disaster
	24	Natural Disaster: such as Flood, Cyclone, Earthquakes and Landslides etc.
13th	25	Man-made Disaster: such as Fire, Industrial Pollution, Nuclear Disaster, Biological Disasters
	26	Accidents (Air, Sea Rail & Road), Structural failures(Building and Bridge), War & Terrorism etc.
14th	27	Disaster Preparedness:
	28	Disaster Preparedness Plan Prediction, Early Warnings and Safety Measures of Disaster
15th	29	Psychological response and Management (Trauma, Stress, Rumour and Panic)
		SESSIONAL III