# SAVITRIBAI PHULE PUNE UNIVERSITY

# **SYLLABUS FOR**

# MASTER IN ARCHITECTURE M.ARCH (LANDSCAPE)

(To be implemented w.e.f. A.Y. 2015-16)

# BOARD OF STUDIES IN ARCHITECTURE FACULTY OF ENGINEERING

#### **PREAMBLE**

From the traditional role that a landscape architect had to fulfill as a designer of gardens, the profession today invites the landscape architect to comment on and to modify open space, bringing to it his understanding of the natural and cultural context of the place. The profession of Landscape Architecture has to constantly respond to the environmental, social and economic concerns in the contemporary context.

# **COURSE OBJECTIVES:**

- 1. To enhance the skillsof an architect with reference to designing and planning of open spaces.
- 2. To develop a theoretical and practical understanding of landscape architecture from micro-level to macro-level.

# SEMESTERWISE LEARNING OUT-COME:

# SEMESTER 1:

To enable the student to develop an understanding about landscape elements and processes associated with natural and designed landscapes.

#### **SEMESTER 2:**

To equip students to respond with a methodical approach to values, issues and concerns associated withhistorical and contemporary landscape.

#### **SEMESTER 3:**

To enable students to comprehend theoretical and professional scope of landscape architecture, in response to global as well as local concerns and to develop a response in regards to the same.

# SEMESTER 4:

To equip students to lay emphasis on self-initiated learning process, in conceptualizing and developing a landscape architectural project.

(25% of the total teaching hours in each semester are reserved for reflecting the institute's philosophy and its reflection in the design studio.)

# RULES OF COURSE STRUCTURE FOR MASTER OF ARCHITECTURE, M.ARCH. (LANDSCAPE)

#### PROVISION OF INFRASTRUCTURE

Course shall be conducted as per the guide lines laid down by the Council of Architecture, New Delhi, with respect to intake of students, class rooms, studios, laboratories, seminar rooms, library facilities, students' amenities and all the appurtenant requirements to carry out teaching activity effectively.

# APPOINTMENT OF TEACHING AND SUPPORTING STAFF

The appointment of teaching staff shall be made as per the norms laid down by C.O.A., New Delhi and other statutory bodies as applicable.

#### **RULE NO. 1 : ELIGIBILITY CRITERIA**

A student seeking admission to Master of Architecture Course must have secured minimum 50% marks in aggregate in a Bachelor of Architecture degree course or equivalent courses recognized by the apex body with / without valid GATE score. The students with valid GATE score shall be given preference and the students without GATE score shall be considered subject to the vacancy.

# **RULE NO. 2: SCHEME OF ASSESSMENT:**

A candidate, to be eligible for the Master's Degree in Architecture, will be required to appear for and pass examinations as under

- 1. First Year M. Arch: SEM I AND SEM II
- 2. Second Year M. Arch.: SEM II AND SEM IV

University will declare combined result of

- SEM I + SEM II at the end of First Year and
- SEM III + SEM IV at the end of Second Year

# **RULE NO. 3: GRANTING OF TERM**

Academic year will consist of TWO SEMESTERS of 90 teaching days each. Sessional work/assignments prepared by the students shall be continuously assessed by the Internal Teacher throughout the semester.

The candidate will be permitted to appear for the examinations at the end of each semester only if he/she keeps term at a college affiliated to the university and produces testimonials from the Principal for

- 1.75% attendance in each head of passing of Theory and /or Sessional work as prescribed by the University.
- 2. Satisfactory completion of the Sessional Work prescribed for each subject and secured at least 50 % marks in the Internal Assessment for the same.
- 3. Good conduct.

#### **RULE NO.4: EXAMINATIONS**

At each examinations Theory Paper Sessional and Sessional and viva – voce based on Sessional Work, as prescribed in the syllabus for the Examination at the end of each semester, shall constitute separate heads of passing.

#### **RULE NO. 5: SESSIONAL WORK ASSESSMENT:**

In respect of Sessional work in First, Second, Third and Fourth semesters, target date shall be fixed for the completion of each assignment. All assignments shall be continuously assessed by the Internal Teacher during each semester.

- b) For the First, Second, and Third Semester examinations, Sessional and Viva assessment will be done by an External Examiner, who is external to the college i.e. teacher from college other than one, whose students are being examined.
- c) For Fourth Semester examination, external assessment shall be carried out by a professional not teaching in any of the Colleges under University of Pune.
- d) An examiner for any of the subjects of examination shall have a minimum of 5 years of teaching / professional experience in his/her specific field of study.

# RULE NO. 6: PRE REQUISITES AND RULES OF A.T.K.T. FOR ADMISSION TO HIGHER CLASSES

This course has been considered as an integrated and students will be allowed to take admission to second, third and fourth semesters irrespective of number of subjects in which they are failing.

# **RULE NO. 7: CRITERIA FOR PASSING**

To pass the First and Second Year Examination, a candidate must obtain minimum 50 % marks in each paper, 50% in Sessional/Viva voce and 50% in aggregate.

#### **RULE NO. 8: GRADING SYSTEM**

# **Assessment and Grade Point Average**

# R-8.1 Marks/Grade/Grade Point

A grade is assigned based on the total marks obtained by a student in all the heads of examination of the course. These grades, their equivalent grade points are given in Table 3.

The guidelines for conversion of marks to grades are given below.

Grade	Grade	Percentage of	Remarks
О	10	90-100	Outstanding
A	9	80-89	Very Good
В	8	70-79	Good
С	7	60-69	Fair
D	6	50-59	Average
Е	0	Below 50	Fail

# **R-8.2 Passing Grade**

The grades **O**, **A**, **B**, **C**, **D**, are passing grades. A candidate acquiring any one of these grades in a course shall be declared as pass. And student shall earn the credits for a course only if the student gets passing grade in that course.

#### R-8.3 E Grade

The grade E shall be treated as a failure grade. The student with E grade will have to pass the concerned course by re-appearing for the examination. The student with E grade for any stage of

the Project Work will have to carry out additional work/ improvement as suggested by the examiners and re-appear for the examination.

#### **Rule No. 9. PERFORMANCE INDICES:**

#### **R-9.1 SGPA**

The performance of a student in a semester is indicated by a number called the Semester Grade Point Average (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses, seminars and projects registered by the student during the semester.

(i) Semester Grade Point Average (SGPA) = 
$$\frac{\sum_{i=1}^{p} \text{Ci Gi}}{\sum_{i=1}^{p} \text{Ci}}$$
SGPA = 
$$\frac{\sum_{i=1}^{p} \text{Ci Gi}}{\sum_{i=1}^{p} \text{Ci}}$$
SGPA = 
$$\frac{\sum_{i=1}^{p} \text{Ci Gi}}{\sum_{i=1}^{p} \text{Ci Gi}}$$

For Example: suppose in a given semester a student has registered for five courses having creditsC1, C2, C3, C4, C5 and his / her grade points in those courses are G1, G2, G3, G4, G5 respectively. Then students

SGPA is calculated up to two decimal places by rounding off.

#### **R-9.2 CGPA**

The CGPA is the weighted average of the grade points obtained in all the courses, seminars and projects registered by the student since student is admitted to the college. It is calculated in the same manner as the SGPA.

**R-9.3** In case of a student clearing a failed course or improvement, the earlier grade would be replaced by the new grade in calculation of the SGPA and CGPA.

# Rule No. 10. RESULT:

**R-10.1** Based on the performance of the student in the semester examinations, the University of Pune will declare the results and issue the Semester Grade sheets.

The University of Pune will issue a Degree Certificate and the final grade sheet of Semester I, II, III & IV, to the student, who is otherwise eligible for the award of Degree of Master of Architecture.

**R-10.2** The class shall be awarded to a student on the CGPA calculated based on all the four semesters. The award of the class shall be as per Table 4.

Sr.	CGPA	Class of the Degree awarded
No.		
1	7.75 or More than 7.75	First Class with Distinction
2	6.75 or more but less than 7.75	First Class
3	6.25 or more but less than 6.75	Higher Second Class
4	5.5 or more but less than 6.25	Second Class

# **RULE NO. 11: EXEMPTIONS AND SUPPLEMENTARY EXAMINATION**

In case a candidate fails and desires to appear again,

- a) He/she will be exempted from appearing in the head/s of passing in which he/she has passed.
- b) A candidate will have to appear for the examination of backlog subjects along with the examination of current semester.

# **RULE NO. 12: OTHER RULES:**

University/ affiliated colleges may frame additional rules and regulations or modify these regulations if required, and once approved by the University, they would be binding on the students.

# UNIVERSITY OF PUNE COURSE STRUCTURE MASTER IN ARCHITECTURE (Landscape) [TO BE IMPLEMENTED W.E.F.ACADEMIC YEAR 2015 - 2016]

Credit Structure for M.Arc	chProgramme				
Course work	Semester I	Semester II	Semester III	Semester IV	Total
Core courses	16	16	16	-	48
Elective Courses	2	2	2	-	6
Lab Courses + Supportive courses	7	7	3	-	17
Seminar	-	-	-	5	5
Project work	-	-	4	20	24
Total	25	25	25	25	100

SEM	ESTER I M.ARC	H (Landscape)	)											
Sub.	Sub		Hrs			TEACHIG SCHEME		MINATI	ON SC	HEME				
Code	SUBJECT	Course	/wk	period/ wk	Lect./	Studio	Paper	Termw	SESSI	ONAL	Oral		Total	CREDITS
					Wk		Int	Ext	Int	Ext				
L1	Landscape Design Studio I	Core	9	12	2	10	-	-	150	150	25	25	350	9
L2	Landscape Construction + Services I	Core	4	5	2	3	-	-	75	75	-	-	150	4
L3	Theory of Landscape I	Core	3	3	2	1	100	25	-	-	-	-	125	3
L4	Elective –I	Elective	2	2	1	1	-	100	-	-	-	-	100	2
L5	Plants and Design	Lab/ Supportive	4	5	2	3	-	-	75	75	-	-	150	4
L6	Natural Sciences	Supportive	3	3	2	1	100	25	-	-	-	-	125	3
TOTA	AL (SEMESTER I)		25	30	11	19	200	150	300	300	25	25	1000	25

SEMI	ESTER II M.ARCI	H (Landscape)	)											
Sub.	Hrs		Hrs		TEACHIG SCHEME		EXAMINATION SCHEME							
Code	SUBJECT	Course	/wk	period/ wk	Lect./	Studio	Paper	Term	SESSI	ONAL	Oral		Total	CREDITS
					Wk	Wk /Wk F <sup>a</sup> ļ		Work	Int	Ext	Int	Ext		
L7	Landscape Design Studio II	Core	9	12	2	10	-	-	150	150	25	25	350	9
L8	Landscape Construction and services II	Core	4	5	2	3	-	-	75	75	-	-	150	4
L9	Theory of Landscape II	Core	3	3	2	1	100	25	-	-	-	-	125	3
L10	Elective-II	Elective	2	2	1	1	-	100	-	-	-	-	100	2
L11	Landscape Professional Practice I	Lab/ Supportive	4	5	2	3	-	-	75	75	-	-	150	4
L12	Research -I	Supportive	3	3	2	1	100	25	-	-	-	-	125	3
TOTA	AL (SEMESTER II)		25	30	11	19	200	150	300	300	25	25	1000	25

SEM	SEMESTER III M.ARCH (Landscape)													
Sub.			Hrs			CHIG EME	EXAMINATION SCHEME							
Code	SUBJECT	Course	/wk	XX712	Lect./	Studio	Paper	Term	SESSIO	NAL	Oral		Total	CREDITS
					Wk /Wk		Work	Int	Ext	Int	Ext			
L13	Landscape Design Studio III	Core	9	12	2	10	-	-	150	150	25	25	350	9
L14	Landscape Management	Core	4	5	2	3	-	-	75	75	-	-	150	4
L15	Landscape Conservation and Planning	Core	3	3	2	1	100	25	-	-	-	-	125	3
L16	Elective-III	Elective	2	2	1	1	-	100	-	-	-	-	100	2
L17	Landscape Professional Practice II ( Training*)	Lab	4	5	2	3	-	-	50	50	25	25	150	4
L18	Environmental Legislation	Supportive	3	3	2	1	100	25	-	-	-	-	125	3
TOTA (SEM	AL ESTER III)		25	30	11	19	200	150	275	275	50	50	1000	25

<sup>\*</sup>This includes Professional Training (40 full working days) to be undertaken during intermediate time between II & III Semester, details of which are mentioned in the detailed syllabus. The Oral Assessment of the same will be held at the end of Semester III.

SEM	ESTER IV M.AR	CH (Landscape	)											
Sub.		Hrs		TEACHING SCHEME		EXAMINATION SCHEME								
Code	SUBJECT	Course	/wk	XX/I/	Lect./	Studio	Paper	TW	SESSIC	NAL	Oral		Total	CREDITS
				Wk		Vk /Wk	•		Int	Ext	Int	Ext		
L19	Landscape Architectural Project	Project Work	20	22	5	17	-	-	300	300	100	100	800	20
L20	Research-II	Seminar	5	8	1	7	-	-	100	100	-	-	200	5
TOTA (SEM	AL ESTER IV)		25	30	6	24	-	-	400	400	100	100	1000	25

<sup>\*\*25%</sup> of the total teaching hours is reserved for reflecting the institute's philosophy and its reflection in the design studio.

#### SEMESTER -I

LANDSCAPE DESIGN STUD	IO–I		
Subject Code -			
Teaching Scheme		<b>Examination Scheme</b>	
Hours / Week	9	Paper	Nil
Lectures/ week	2	Term work	Nil
Studio Periods/ week	10	Sessional (Internal)	150
		Sessional (external)	150
Total Contact Periods/ week	12	Oral (Internal)	25
		Oral (External)	25
<b>Total Credits</b>	9	Total Marks	350

# **Objective**

To understand the process of landscape design and to analyze, landscape design elements at micro and macro level, in terms of their form, function and aesthetics, by undertaking studio projects dealing with design of outdoor spaces.

#### **Course contents**

- 1. Studying elements of landscape design
- 2. Landscape appraisal
- 3. Introduction to Landscape Design Process
- 4. Site analysis and site planning
- 5. Use of landscape elements in the design of outdoor spaces

# Sessional/Term Work

Students will work on analytical and design projects and will produce the work in the form of drawings and model.

#### Assessment

The sessional work as stipulated above will be assessed internally and externally with equal weightage of 150 marks each for sessional work along with external jury of equal weightage of 25 marks each for Viva –voce and a consolidated list of both will be submitted to the university.

- 1. Simonds. J. O. (1961). *Landscape Architecture, The Shaping of Man's Natural Environment*. London: F.W. Dodge Cooperation.
- 2. Harris.C.W and Dine.N.T; *Time Saver Standards For Landscape Architecture*, Mcgraw Hill International Edition, Arch. Series
- 3. Starke .B and Simonds. J. O. (2013) *Landscape Architecture: A Manual of Site Planning and Design*. 5 editions. McGraw-Hill Professional
- 4. Baker.B.H (1987) *A Dictionary of Landscape Architecture*. Albu: University Of New MexicoPress
- 5. Reid G. W: (1987) Landscape Graphics.
- 6. Shaheer .M, Dua G.W and Pal.A .(2012) *Landscape Architecture in India: a reader* .India: La, Journal of Landscape Architecture
- 7. Reid G. W: (1993) From Concept to Form: In Landscape Design. John Wiley & Sons
- 8. All publications by AVA

LANDSCAPECONSTRUCTION AND SERVICES-I								
Subject Code -								
Teaching Scheme		<b>Examination Scheme</b>						
Hours / Week	4	Paper	Nil					
Lectures/ week	2	Term work	Nil					
Studio Periods/ week	3	Sessional (Internal)	75					
		Sessional (external)	75					
Total Contact Periods/ week	5	Oral (Internal)	Nil					
		Oral (External)	Nil					
<b>Total Credits</b>	4	Total Marks	150					

To understand the grading, construction and outdoor services in landscape architecture

#### **Course contents**

- 1. Grading techniques- introduction to contours and grading earthwork computation and grading of various areas like roads, terraces, softscape and hardscape areas, sports fields, , grading devices, cut and fill methods, storm water runoff systems, erosion control methods
- 2. Introduction to construction of hardscape and materials used in designed landscapes
- 3. Introduction to Storm water drainage systems
- 4. Introduction to Outdoor lighting
- 5. Introduction to Irrigation techniques
- 6. Introduction to water feature systems in designed landscape such swimming pools, fountains, etc

#### Sessional/Term Work

Assignment will be in the form of notes/ assignments covering all the topics mentioned above with suitable examples, sketches and supportive material. Students will work on at least one project taken up in the Landscape Design studio- I and work on landscape details of the project relating to all the above mentioned topics in the form of sheets and report.

#### **Assessment**

The sessional work along with external jury as stipulated above will be assessed internally and externally with equal weightage of 75 marks each and a consolidated list of both will be submitted to the university.

- 1. Harris.C.W and Dine.N.T; (1997) *Time Saver Standards For Landscape Architecture*, Mcgraw Hill International Edition, Arch. Series
- 2. Storm.S and Kurt Nathan P.E;(1985) *Site Engineering for Landscape Architects*, AVI Publishing Company
- 3. Landphair HC; (1984) Landscape architecture construction. Elsevier
- 4. Christensen A J; (2005) Dictionary of Landscape Architecture And Construction .McGraw-Hill
- 5. Thomas J. R. Hughes; Site Engineering for Landscape Architects
- 6. Untermann, R. (1973) *Grade Easy: an introductory course in the principles and practices of grading and drainage*, Landscape Architecture Foundation

THEORY OF LANDSCAPE -	[		
Subject Code -			
Teaching Scheme		<b>Examination Scheme</b>	
Hours / Week	3	Paper	100
Lectures/ week	2	Term work	25
Studio Periods/ week	1	Sessional (Internal)	Nil
		Sessional (external)	Nil
Total Contact Periods/ week	3	Oral (Internal)	Nil
		Oral (External)	Nil
<b>Total Credits</b>	3	Total Marks	125

To understand the development and chronological evolution of landscape architecture based on analysis of the natural, cultural factors, with respect to spatial and temporal framework.

#### **Course contents**

- 1. Studying various landscapes and garden designs from history in conjunction with the societal processes
- 2. Traditions in landscape architecture throughout the world till the 19<sup>th</sup> Century
- 3. The Indian Context with emphasis on understanding attitudes to open space design in Ancient India, ancient horticultural practices, various influences in landscape and garden design such as Mughal, British colonial and the Portuguese.

# Sessional/Term Work

Studies taken up by students individually and/or in groups will be presented and submitted along with compilation of study material in the form of reports/ notes/ assignments.

#### **Assessment**

The term work in the form of notes/ assignments, as stipulated above will be assessed internally with weightage of 25 marks. Theory examination based on the aforesaid course outline for this subject will be conducted for 100 marks.

- 1. Jellicoe G. and Jellicoe S;(1995). *The Landscape of Man: Shaping the Environment from Prehistory to the Present Day:* Thames and Hudson
- 2. Turner .T (2010), Asian Gardens: History, Beliefs and Design. London and New York: Routledge
- 3. Turner .T (2011), European Gardens: History, Philosophy and Design. London and New York: Routledge
- 4. Rogers.E.B;(2001)Landscape Design: A Cultural and Architectural History: Harry N. Abrams
- 5. Waymark J, Georges T. (2000) History Of Garden Design; Thames & Hudson
- 6. Moore C W / Mitchell W J;(1993) Poetics of Garden; London: MIT Press

ELECTIVE- I			
Subject Code -			
<b>Teaching Scheme</b>		<b>Examination Scheme</b>	
Hours / Week	2	Paper	Nil
Lectures/ week	1	Term work	100
Studio Periods/ week	1	Sessional (Internal)	Nil
		Sessional (external)	Nil
Total Contact Periods/ week	2	Oral (Internal)	Nil
		Oral (External)	Nil
<b>Total Credits</b>	2	Total Marks	100

To understand theories, concerns and values in the areas with respect to one of the following subjects as per student's inclination and to develop awareness towards the same in reference to Landscape Design.

#### **Course contents**

Individual college may offer the students one or more topics, depending upon the availability of experts and resource material. The colleges will have the opportunity to focus on one or more of the following topics:

- 1. Landscape Architecture and Allied Arts
- 2. Universal Design
- 3. Social and behavioral studies
- 4. Parametric design in landscape Architecture

Detailed syllabus for all topics will be finalized by individual college in consultation with expert faculty, considering the time and marks allotted to the subject.

#### Sessional/Term Work

Assignment will be in the form of individual study of a topic related to any one of the subject based on availability of experts, which will be presented by the student in the form of an audio-visual presentation and a report on the same.

#### Assessment

The term work as stipulated above will be assessed internally out of 100 marks.

# **Recommended Readings**

All books/ Journals/ Magazines/ unpublished/published research/websites related to the topic selected by the individual student.

PLANTS AND DESIGN			
Subject Code -			
Teaching Scheme		<b>Examination Scheme</b>	
Hours / Week	4	Paper	Nil
Lectures/ week	2	Term work	Nil
Studio Periods/ week	3	Sessional (Internal)	75
		Sessional (external)	75
Total Contact Periods/ week	5	Oral (Internal)	Nil
		Oral (External)	Nil
<b>Total Credits</b>	4	Total Marks	150

To understand the process of planting design at various scales, through the study of plant material/vegetation as one of the important landscape design elements, in addressing ecological, functional and visual aspects of environment.

#### **Course contents**

- 1. Characteristics of Plant Materials and factors influencing choice of plant material for specific design applications
  - a. Plants in the natural landscape like forests, riparian areas, aquatic environments, etc.
  - b. Planting for designed landscape from small scale spaces to urban landscape
  - c. Planting for landscape restoration
  - d. Planting for vertical landscapes
- 2. Understanding and plant selection criteria in landscape –functional, ecological, visual, cultural and temporal
- 3. Introduction to planting patterns, techniques and plants for floriculture, arboriculture, agricultural, etc.
- 4. Graphic representation of planting in landscape architecture
- 5. Planting techniques and maintenance criteria for trees, shrubs, ground covers, aquatic plants, etc.

#### Sessional/Term Work

Assignment will be in the form of notes/ assignments covering all the topics mentioned above with suitable examples, sketches and supportive material. Students will work on at least one project taken up in the design studio- I and work on landscape details of the project relating to all the above mentioned topics in the form of sheets and /or report.

#### **Assessment**

The sessional work along with external jury as stipulated above will be assessed internally and externally with equal weightage of 75 marks each and a consolidated list of both will be submitted to the university.

- 1. Cloustan B Ed.;(1990) Landscape Design With Plants; London: Butterworth-Heinemann
- 2. Nick Robinson (1992) The Planting Design Handbook: Ashgate Pub Ltd
- 3. Bose T. K. and Chowdhury. BEd. ;(1992) Tropical Garden Plants In Colour : A guide to tropical ornamental plants for garden and home: South Asia Books
- 4. Mukherjee P; (1983) Nature Guides: Common Trees of India; India: Oxford U.P.
- 5. Platts R; (2004) Traditional Gardens: Plans And Planting Designs: Cassell Illustrated
- 6. Rix M;(2006) Subtropical And Dry Climate Plants: Definitive Practical Guide: Timber Press, Incorporated

NATURAL SCIENCES				
Subject Code -				
Teaching Scheme		Examination Scheme		
Hours / Week	3	Paper	100	
Lectures/ week	2	Term work	25	
Studio Periods/ week	1	Sessional (Internal)	Nil	
		Sessional (external)	Nil	
Total Contact Periods/ week	3	Oral (Internal)	Nil	
		Oral (External)	Nil	
<b>Total Credits</b>	3	Total Marks	125	

To introduce the basic concepts and theories related to Botany, Plant systematics, Geology, Soil sciences, Hydrology and Climatology.

#### **Course contents**

- I. **Botany** Introduction to ecological systems and biomes, Study of plants, their morphology, physiology, anatomy and taxonomy, principles of classification, functioning and growth of plants, botanical structure and systems in a plant, Studying plant communities at a regional scale, understanding of regional distribution of plants, Flora of India, Understanding horticulture practices i.e. plant propagation, soil preparation and planting methods, Review of Botanical Gardens, plants associations, plants suitability with respect to strata,
- II. Geology and Soils –Earth in Space, Origin and evolution of planet Earth, Geological time, GTS, Origin and Evolution of Life, Matter and energy, Minerals, Rocks, Types of rocks, Rock Cycle, Crystal Deformation, Internal Structure of Earth, Plate Tectonics, Mountain Building, Earthquakes, Volcanoes, Geomorphology and Surface processes, Natural Drainage, Types of Weathering, Landforms made by Weathering and Erosion, Work of Rivers, Work of Wind, Glaciers, and corresponding Landforms, Coastal Processes, Control of Geology on landforms, Mass Movements .introduction to geology of the state and of India, Soil types, Soil Formation ,Classification of soils and their properties, Degradation of soils, Problem Soils, Study of Topographic Features and Toposheets,Geology and Physiographic of India, Survey of Indian soil types, Mapping of Soils, amendment of soil
- III. **Hydrology** Hydrological cycle, Precipitation and Surface runoff, Natural Drainage, river basins, Concept of Watershed, Watershed Management, Infiltration and Soil Moisture, Ground Water, Occurrence and movement of ground water, Water bearing properties of geological formations, artesian conditions, Hydrogeology of Deccan Traps, Floods, Characteristics and management of drainage basins, Development of Karst topography, Arid and semi-arid regions, Coastal Hydrogeology, Saltwater intrusions, introduction to geology of the state and of India
- IV. **Climatology**—Introduction to the concept of climate, Composition of atmosphere, elements of weather and understanding various biomes and detailed understanding of climate and microclimate and its components. Understanding of landscape elements with respect to microclimate and introduction to their quantification, Introduction to Climate types and zones in India

# Sessional/Term Work

Studies taken up by students individually and/or in groups will be presented and submitted along with compilation of study material in the form of reports/ notes/ assignments.

#### Assessment

The term work in the form of notes/ assignments, as stipulated above will be assessed internally with weightage of 25 marks. Theory examination based on the aforesaid course outline for this subject will be conducted for 100 marks.

- 1. Arbogast A; (2011) Discovering Physical Geography 2nd Edition : Wiley
- 2. Bateman G: Ed;(2008) Encyclopedia Of World Geography: Book Sales
- 3. Craul T A; (2006) Soil Design Protocols For Landscape Architects And Contractors: Wiley
- 4. Koenisberger.O ;(1974) Manual Of Tropical Housing And Climate: Longman Group United Kingdom
- 5. Olgyay, Victor and AladarOlgyay; (1963) *Design with climate*; Princeton, N.J. Princeton University Press.
- 6. M S Krishnan; (2006) *Geology Of India And Burma*; 6<sup>th</sup> Edition: CBS Publishers & Distributors
- 7. Dr. J. A. Daji, revised by Dr. J. R. Kadam&Dr. N. D. Patil; *A text book of Soil Science*; Mumbai: Media Promoters & Publishers Pvt. Ltd.,

#### SEMESTER -II

LANDSCAPE DESIGN STUDIO-II					
Subject Code -					
Teaching Scheme		<b>Examination Scheme</b>			
Hours / Week	9	Paper	Nil		
Lectures/ week	2	Term work	Nil		
Studio Periods/ week	10	Sessional (Internal)	150		
		Sessional (external)	150		
Total Contact Periods/ week	12	Oral (Internal)	25		
		Oral (External)	25		
<b>Total Credits</b>	9	Total Marks	350		

# **Objective**

To understand the site context and to resolve complex landscape issues in an urban or rural fabric of residential / commercial/ institutional/ recreational landuse associated with flat / contoured sites.

#### **Course contents**

- 1. Site analysis, synthesis, suitability, landscape zoning and planning with landscape land uses for medium to large scale projects.
- 2. Evolving an open space structure for the site and suggesting a suitable landscape treatment with respect to ecological, functional, cultural and visual context.
- 3. Process for landscape project formulation and landscape design development based on synthesis

#### Sessional/Term Work

Students will work on above mentioned in detail and will submit the work in the form of drawings and/ models

# **Assessment**

The sessional work as stipulated above will be assessed internally and externally with equal weightage of 150 marks each for sessional work along with external jury of equal weightage of 25 marks each for Viva –voce and a consolidated list of both will be submitted to the university.

- 1. Simonds. J. O. (1961). *Landscape Architecture, The Shaping of Man's Natural Environment*. London: F.W. Dodge Cooperation.
- 2. Harris.C.W and Dine.N.T; (1997) *Time Saver Standards For Landscape Architecture*, Mcgraw Hill International Edition, Arch. Series
- 3. Starke .B and Simonds. J. O. (2013) *Landscape Architecture: A Manual of Site Planning and Design*. 5 editions. McGraw-Hill Professional
- 4. Baker.B.H (1987) *A Dictionary of Landscape Architecture*. Albu: University Of New MexicoPress
- 5. Reid G. W: (1987) Landscape Graphics: Watson-Guptill
- 6. Shaheer .M, Dua G.W and Pal.A .(2012) *Landscape Architecture in India: a reader* .India: La, Journal of Landscape Architecture
- 7. Reid G. W: (1993)From Concept to Form: In Landscape Design. John Wiley & Sons
- 8. All publications by Brian Hackett

LANDSCAPECONSTRUCTION AND SERVICES-II				
Subject Code -				
Teaching Scheme		Examination Scheme		
Hours / Week	4	Paper	Nil	
Lectures/ week	2	Term work	Nil	
Studio Periods/ week	3	Sessional (Internal)	75	
		Sessional (external)	75	
Total Contact Periods/ week	5	Oral (Internal)	Nil	
		Oral (External)	Nil	
<b>Total Credits</b>	4	Total Marks	150	

To understand landscape techniques and new technological advancements for various specialized areas like highways, parkways, roof landscapes, vertical landscapes, disturbed landscapes like quarries, wastelands, waterfronts landscapes, etc.

#### **Course contents**

- 1. Disturbed landscapes and role of landscape architect
- 2. Specialized areas such as roads, parkways, roof landscapes, vertical landscapes, new large scale developments and role of landscape architect
- 3. Introduction to preventive and curative landscape measures and landscape services involved in such ecologically sensitive landscapes.

#### Sessional/TermWork

Assignment will be in the form of notes/ assignments covering all the topics mentioned above with suitable examples, sketches and supportive material.

# **Assessment**

The sessional work along with external jury as stipulated above will be assessed internally and externally with equal weightage of 75 marks each and a consolidated list of both will be submitted to the university.

- 1. Harris.C.W and Dine.N.T; (1997) *Time Saver Standards For Landscape Architecture*, Mcgraw Hill International Edition, Arch. Series
- 2. Asensio C.F ;(1996) *Environmental Restoration Landscape* .(Arco Colour Collection):RotoVision
- 3. Özyavuz.M (2013); Advances in Landscape Architecture. In Tech
- 4. Weiler .S and Barth.K.S ;(2009) *Green Roof Systems: A Guide to the Planning, Design and Construction of Landscapes over Structure* :Wiley and Sons

THEORY OF LANDSCAPE –II				
Subject Code -				
Teaching Scheme		<b>Examination Scheme</b>		
Hours / Week	3	Paper	100	
Lectures/ week	2	Term work	25	
Studio Periods/ week	1	Sessional (Internal)	Nil	
		Sessional (external)	Nil	
Total Contact Periods/ week	3	Oral (Internal)	Nil	
		Oral (External)	Nil	
<b>Total Credits</b>	3	Total Marks	125	

To understand the paradigms in landscape architecture in the post industrial revolution era and to understand the multifaceted dimensions of landscape architecture such as ecology, environment-behavior and sustainability.

#### **Course contents**

- 1. Theories and Landscape design: Habitat theory, Personal space, Prospect –refuge theory. Perception, Behavior, etc.
- 2. Evolution of landscape architecture in the post industrial world
- 3. Contemporary and futuristic approaches in designed landscapes across the world
- 4. Sustainable landscape practices in landscape design

# Sessional/Term Work

Studies taken up by students individually and/or in groups will be presented and submitted along with compilation of study material in the form of reports/ notes/ assignments.

#### Assessment

The term work in the form of notes/ assignments, as stipulated above will be assessed internally with weightage of 25 marks. Theory examination based on the aforesaid course outline for this subject will be conducted for 100 marks.

- 1. Jellicoe G. and Jellicoe S;(1995). *The Landscape of Man: Shaping the Environment from Prehistory to the Present Day:* Thames and Hudson
- 2. McHarg, Ian L, (1969) Design with Nature, Garden City, N.Y: The Natural History Press,
- 3. Appleton.J;(1996),the experience of landscape: Wiley
- 4. Lyall S; (1992) Designing The New Landscape: Thames and Hudson
- 5. Brown J.(2000) The Modern Garden: Princeton Architectural Press
- 6. Tate A;(2001) Great City parks: Taylor & Francis
- 7. Siciliano P C; (2004) *Landscape Interpretations : History, Techniques and Design Inspiration:*Delmar Cengage Learning
- 8. Simon Swaffield; (2002) *Theory in Landscape Architecture- A Reader*; University of Pennsylvania Press
- 9. Tom Turner;(1996) City as Landscape- A post-modern view of Design and Planning; London: E and FN Spon,

- 10. Steven C. Bourassa; (1991)*The Aesthetics of Landscape*, London:Belhaven Press 11. Sylvia Crowe; (1958) *Landscape of Power*, London: The Architectural Press

ELECTIVE-II			
Subject Code -			
Teaching Scheme		<b>Examination Scheme</b>	
Hours / Week	2	Paper	Nil
Lectures/ week	1	Term work	100
Studio Periods/ week	1	Sessional (Internal)	Nil
		Sessional (external)	Nil
Total Contact Periods/ week	2	Oral (Internal)	Nil
		Oral (External)	Nil
Total Credits	2	Total Marks	100

To understand theories, concerns and values in the areas with respect to one of the following as per student's inclination and to develop awareness towards the same in reference to Landscape Architecture.

#### **Course contents**

Individual college may offer the students one or more topics, depending upon the availability of experts and resource material. The colleges will have the opportunity to focus on one or more of the following topics:

- 1. Ecosystem Analysis
- 2. Degraded and Disturbed Landscapes
- 3. Sustainable Landscape Practices
- 4. Cultural Landscapes

Detailed syllabus for all topics will be finalized by individual college in consultation with expert faculty, considering the time and marks allotted to the subject.

#### Sessional/Term Work

Assignment will be in the form of individual study of a topic related to any one of the subject based on availability of experts, which will be presented by the student in the form of an audio-visual presentation and a report on the same.

# Assessment

The term work as stipulated above will be assessed internally out of 100 marks.

# **Recommended Readings**

All books/ Journals/ Magazines/ unpublished/published research/websites related to the topic selected by the individual student.

LANDSCAPE PROFESSIONAL PRACTICE -I				
Subject Code -				
Teaching Scheme		<b>Examination Scheme</b>		
Hours / Week	4	Paper	Nil	
Lectures/ week	2	Term work	Nil	
Studio Periods/ week	3	Sessional (Internal)	75	
		Sessional (external)	75	
Total Contact Periods/ week	5	Oral (Internal)	Nil	
		Oral (External)	Nil	
<b>Total Credits</b>	4	Total Marks	150	

To explore ideas, process and methods in current landscape architecture- professional practice with focus on preparation on working drawings.

#### **Course contents**

- 1. Landscape working drawings with proper annotations and legends and understanding the universal vocabulary for this subject.
- 2. Landscape specification writing
- 3. Costing and estimation

#### Sessional/Term Work

Notes/ assignments related to the theory topics for the subject, working drawings of any project done in current or previous semester submitted in the form of sheets .This will include specification writing and costing and estimation of the same.

#### **Assessment**

The sessional work as stipulated above will be assessed internally and externally with equal weightage of 75 marks each and a consolidated list of both will be submitted to the university.

- 1. Hugh Clamp;(1988) Landscape Professional Practice; Gower Technical Press Ltd.,
- 2. Charles W Harris And Nicholas T Dine; (1997) *Time Saver Standards For Landscape Architecture*, Mcgraw Hill International Edition, Arch. Series
- 3. Jagdish S, GurucharanS; Estimating Costing And Valuation; Delhi: Standard Publications
- 4. Rangwala S C AndRangwala K S And Rangwala K K; (2014) *Estimating And Costing*; Charotar Pub. House, Anand, India
- 5. Handbook of Professional Documents, by Council of Architecture, India

RESEARCH-I				
Subject Code -				
Teaching Scheme		<b>Examination Scheme</b>		
Hours / Week	3	Paper	100	
Lectures/ week	2	Term work	25	
Studio Periods/ week	1	Sessional (Internal)	Nil	
		Sessional (external)	Nil	
Total Contact Periods/ week	3	Oral (Internal)	Nil	
		Oral (External)	Nil	
<b>Total Credits</b>	3	Total Marks	125	

To introduce methods and process of research, in order to understand the significance of the same with reference to landscape architecture and to develop skills of conducting and communicating research.

#### **Course contents**

- 1. Introduction to the types of research and the process of formulating a research project
- 2. Introduction to various methods of research, their relative advantages and disadvantages and their applications
- 3. Introduction to technical writing and presenting a research paper
- 4. Introduction to cyber security and laws related to the same
- 5. Introduction to softwares for checking plagiarism

# Sessional/Term Work

To undertake a focused study based upon a research question and to present it in form of a research paper, compilation of study material, along with brief assignments demonstrating the steps in the research process.

# Assessment

The term work in the form of notes/ assignments, as stipulated above will be assessed internally with weightage of 25 marks. Theory examination based on the aforesaid course outline for this subject will be conducted for 100 marks.

- 1. Creswell, J. W. (2003) *Research Design: Qualitative, quantitative and mixed methods approaches*, 2nd Ed., Thousand Oaks: Sage.
- 2. De Vaus, D. A. (2003) Surveys in Social Research, Jaipur: Rawat Publications.
- 3. Groat, L. & Wang, D. (2002) Architectural Research Methods, NY: John Wiley and Sons Inc.
- 4. Kothari, C.R. (2005) *Research Methodology: Methods and Techniques*, New Delhi: WishwaPrakashan.
- 5. Sanoff, H. (1977) *Methods of Architectural Programming*, Dowden Hutchinson and Ross, Inc. Vol. 29, Community Development Series.
- 6. Sanoff, H. (1991) Visual research methods in design, USA: Van Nostrand Reinhold.

#### **SEMESTER-III**

LANDSCAPE DESIGN STUDIO-III				
Subject Code -				
Teaching Scheme		<b>Examination Scheme</b>		
Hours / Week	9	Paper	Nil	
Lectures/ week	2	Term work	Nil	
Studio Periods/ week	10	Sessional (Internal)	150	
		Sessional (external)	150	
Total Contact Periods/ week	12	Oral (Internal)	25	
		Oral (External)	25	
<b>Total Credits</b>	9	Total Marks	350	

# **Objective**

To understand the complex issues related to landscape architecture including site planning, landscape planning and to develop the concept of landscape development as an interacting process between natural, man-made and social environment.

#### **Course contents**

Preparation of Comprehensive Landscape Development Plan (CLDP)/Landscape Policy and guidelines based on the analysis, synthesis and development of a landscape proposal defining an appropriate landscape approach

#### Sessional/Term Work

Students will work on the project addressing the above mentioned issues, resolving the problems through landscape design and planning and will submit the same in the form of a written report and drawings and/or models.

#### **Assessment**

The sessional work as stipulated above will be assessed internally and externally with equal weightage of 150 marks each for sessional work along with external jury of equal weightage of 25 marks each for Viva –voce and a consolidated list of both will be submitted to the university.

- 1. Bull.C (2006) *New Conversations with an Old Landscape: Landscape Architecture in Contemporary Australia*: Images Publishing Dist Ac.
- 2. Publications of Brian Hackett
- 3. Tilley .A.R (2001); The Measure of Man & Woman: Human Factors in Design: Wiley

LANDSCAPEMANAGEMENT				
Subject Code -				
<b>Teaching Scheme</b>		Examination Scheme		
Hours / Week	4	Paper	Nil	
Lectures/ week	2	Term work	Nil	
Studio Periods/ week	3	Sessional (Internal)	75	
		Sessional (external)	75	
Total Contact Periods/ week	5	Oral (Internal)	Nil	
		Oral (External)	Nil	
<b>Total Credits</b>	4	Total Marks	150	

To understand landscape management principles and concepts with respect to natural and manmade contexts.

#### **Course contents**

- 1. Management concepts related to
  - o Designed landscapes
  - o Urban open space
  - o Sub-urban and rural landscapes
  - o Natural landscapes such as forests, streams etc.
  - o Historic and protected landscapes
- 2. Introduction to project management in overall site and landscape development
- 3. Understanding Landscape Management Framework
- 4. Understanding management of landscape projects under execution and after execution

# Sessional/Term Work

Assignment will be in the form of notes/ assignments covering all the topics mentioned above with suitable examples, sketches and supportive material.

#### Assessment

The sessional work along with external jury as stipulated above will be assessed internally and externally with equal weightage of 75 marks each and a consolidated list of both will be submitted to the university.

- 1. Lockwood M Ed.; Managing Protected Areas: A Global Guide
- 2. Grenville. J Ed.(1999) Managing the Historic rural landscapes . Routledge
- 3. Cobham: (1990) *Amenity Landscape Management –A Resource handbook*. London, New York: E & F.N. Spon,
- 4. Ed By Loftus J(1999); *Project Management Of Multiple Projects And Contracts*; London: Thomas Telford Publishing
- 5. WiestJd ,Levy F K; A Management Guide To Pert/Cpm, Prentice Hall Of India Pvt, Ltd, New Delhi
- 6. James A F, Edward Freeman R and Gilbert Daniel R ;( 2006) *Management*, 6<sup>th</sup> Edition. New Delhi: Prentice Hall Of India Pvt Ltd,
- 7. P.H.C. Lucas; (1992) Protected Landscapes-A guide for policy makers and planners, London: CHAPMAN AND HILL,
- 8. Woudstra. I and Fieldhouse. K ;( 2000) The *Regeneration of Public Parks*; London: E and FN Spon.

LANDSCAPE CONSERVATION AND PLANNING				
Subject Code -				
Teaching Scheme		<b>Examination Scheme</b>		
Hours / Week	3	Paper	100	
Lectures/ week	2	Term work	25	
Studio Periods/ week	1	Sessional (Internal)	Nil	
		Sessional (external)	Nil	
Total Contact Periods/ week	3	Oral (Internal)	Nil	
		Oral (External)	Nil	
<b>Total Credits</b>	3	Total Marks	125	

To understand the basic principles and concepts related to conservation of Landscape and landscape planning.

#### **Course contents**

- 1. Landscape Planning
  - a. Concept, methodology, process and theories
  - b. Concept of garden city and its evolution
  - c. Contemporary approaches in planning of cities
  - d. Role of landscape architect in preparation of regional plans , city master plans , townships etc
  - e. Concept of Landscape Regionalism
  - f. Open space structure for a city and for a region
  - g. Landscape landuses and related policy framework for regional landscape planning
  - h. Multidisciplinary framework for regional landscape planning
- 2. EIA- Environmental Impact Assessment:
  - a. Role of environmental impact assessment in landscape planning
  - b. Framework for EIA- Environmental Impact Analysis
- 3. Landscape Conservation
  - a. Importance of landscape conservation and various approaches to same
  - b. Conservation of historic and cultural landscapes
  - c. Conservation of natural resources
  - d. Understanding socio-cultural practices and its implications on landscape ecology
  - e. Ecological assessment and mapping of landscape with respect to biodiversity, soil, water etc. for understanding of ecologically sensitive sites.
  - f. Understanding socio-cultural practices and its implications on landscape ecology
- 4. Introduction to the preparation of Landscape Conservation and Management Plan

# Sessional/TermWork

Studies taken up by students individually and/or in groups will be presented and submitted along with compilation of study material in the form of reports/ notes/ assignments.

# Assessment

The term work in the form of notes/ assignments, as stipulated above will be assessed internally with weightage of 25 marks. Theory examination based on the aforesaid course outline for this subject will be conducted for 100 marks.

- 1. McHarg, I. L, (1969) Design with Nature, Garden City, N.Y: The Natural History Press,.
- 2. Simonds, J.O; (1978) Earthscape- A Manual of Environmental Planning; NY: Mc Graw- Hill Book Company.
- 3. Lovejoy.D; (1975) Landuse and Landscape Planning; Glasgow: Leonard Hill
- 4. Turner T;(1987) Landscape Planning, London: Hutchinson
- 5. Eaton R M; (2002) *Ideal Cities*: *Utopianism And The(Un) Built Environment:* Thames & Hudson
- 6. Selman Paul; (2006) Planning at the landscape scale: Routledge
- 7. Turner T; (1995) City As Landscape: A Post Postmodern View Of Design And Planning; Taylor & Francis
- 8. Simonds J.O;(1994) Garden Cities 21- Creating a Livable Urban Environment; Mc Grae Hill, Inc.
- 9. Marsh W.M; (1983) Landscape Planning and Environmental Applications; New York: John Wiley and Sons, Inc.
- 10. Publications of Brian Hackett

ELECTIVE – III			
Subject Code -			
Teaching Scheme		Examination Scheme	
Hours / Week	2	Paper	Nil
Lectures/ week	1	Term work	100
Studio Periods/ week	1	Sessional (Internal)	Nil
		Sessional (external)	Nil
Total Contact Periods/ week	2	Oral (Internal)	Nil
		Oral (External)	Nil
Total Credits	2	Total Marks	100

To understand theories, concerns and values in the areas with respect to one of the following as per student's inclination and to develop awareness towards the same in reference to Landscape Design.

# **Course contents**

Individual college may offer the students one or more topics, depending upon the availability of experts and resource material. The colleges will have the opportunity to focus on one or more of the following topics:

- 1. GIS and Computer Applications in landscape architecture
- 2. Landscape Architecture and climate change
- 3. Environment Impact Assessment
- 4. Landscape Urbanism

Detailed syllabus for all topics will be finalized by individual college in consultation with expert faculty, considering the time and marks allotted to the subject.

# Sessional/Term Work

Assignment will be in the form of individual study of a topic related to any one of the subject based on availability of experts, which will be presented by the student in the form of an audio-visual presentation and a report on the same.

#### Assessment

The term work as stipulated above will be assessed internally out of 100 marks.

# **Recommended Readings**

All books/ Journals/ Magazines/ unpublished/published research/websites related to the topic selected by the individual student.

LANDSCAPE PROFESSIONAL PRACTICE -II				
Subject Code -				
Teaching Scheme		<b>Examination Scheme</b>		
Hours / Week	4	Paper	Nil	
Lectures/ week	2	Term work	Nil	
Studio Periods/ week	3	Sessional (Internal)	50	
		Sessional (external)	50	
Total Contact Periods/ week	5	Oral (Internal)	25	
		Oral (External)	25	
<b>Total Credits</b>	4	Total Marks	150	

To give an opportunity for learning and for development of skillsrelated to practical aspects of the discipline of Landscape Architecture, by working in a professional firm.

#### **Course contents**

- Introduction to Professional practice Ethics, code of conduct and liabilities as landscape architects, contracts and tenders, execution procedures. Professional fees. Role of various bodies and organizations like COA, ISOLA, IFLA,professional procedures, office management, project development, contracts, and collaborative ventures
- Contracts and Tenders associated with Landscape Architectural Practice
- Introduction to international codes and conduct in the profession
- Approval processes, planning mechanisms and working structure associated with governmental organizations (MOEF, Municipal Corporations, etc.) and large scale landscape projects (Special townships, sites more than 10 acres)
- The students shall undergo Professional Training (40 full working days) to be undertaken during intermediate time between II & III Semester. It involves working in a Landscape Architect's Firm in India or abroad. The Oral Assessment of the same will be held at the end of Semester III.

#### Sessional/Term Work

Final submission will include compilation of the work done during the training in the form of A3 report. All hard copies need to be submitted with the signature of the head and the stamp of the firm, at the time of appearing for the viva-voce.

#### Assessment

The sessional work as stipulated above will be assessed internally and externally with equal weightage of 50 marks each for sessional work along with external jury of equal weightage of 25 marks each for Viva – voce and a consolidated list of both will be submitted to the university.

#### **Recommended Readings**

1. Websites of various professional organization associated with the profession of Landscape Architecture

ENVIRONMENTAL LEGISLATION					
Subject Code -					
Teaching Scheme		<b>Examination Scheme</b>			
Hours / Week	3	Paper	100		
Lectures/ week	2	Term work	25		
Studio Periods/ week	1	Sessional (Internal)	Nil		
		Sessional (external)	Nil		
Total Contact Periods/ week	3	Oral (Internal)	Nil		
		Oral (External)	Nil		
<b>Total Credits</b>	3	Total Marks	125		

To understand legislative aspects related to environment, resources and landscape architecture.

# **Course contents**

- 1 Legislation framework for environment in context of India and World.
- 2 International framework related to landscape legislation
- 3 National and International policies related to landscape conservation areas such as forests, national parks, protected landscapes, bio reserves etc.
- 4 Environmental legislation dealing with, Town planning, forestry, national parks and sanctuaries, Urban and rural planning, Historic and protected Landscapes
- 5 Important Acts in India related to Forests and Biodiversity, such as Forest Act 1927, 1980
- 6 Forest policies related to Western Ghats in India
- 7 Policies related to wetland preservation
- 8 Human rights and value education

#### Sessional/Term Work

Studies taken up by students individually and/or in groups will be presented and submitted along with compilation of study material in the form of reports/ notes/ assignments.

# **Assessment**

The term work in the form of notes/ assignments, as stipulated above will be assessed internally with weightage of 25 marks. Theory examination based on the aforesaid course outline for this subject will be conducted for 100 marks.

- 1. Birnie,P W & Boyle; (2002) International Law And The Environment, Marsh W;Landscape Planning: Environmental Applications; USA: Oxford University Press
- 2. Fischer T B ;(2007) Theory And Practice Of Strategic Environmental Assessment : Towards A More Systematic Approach: Routledge
- 3. Jones C Ed.;(2005) Strategic Environmental Assessment And Land Use Planning : An International Evaluation: Routledge
- 4. Lee.J (1986) *The Environment, Public Health And Human Ecology Consideration For Economic Development:* The Johns Hopkins University Press
- 5. Saksena, K.D; Environmental Policies And Programs In India

#### SEMESTER -IV

LANDSCAPE ARCHITECTURAL PROJECT					
Subject Code -					
Teaching Scheme		Examination Scheme			
Hours / Week	20	Paper	Nil		
Lectures/ week	5	Term work	Nil		
Studio Periods/ week	17	Sessional (Internal)	300		
		Sessional (external)	300		
Total Contact Periods/ week	22	Oral (Internal)	100		
		Oral (External)	100		
<b>Total Credits</b>	20	Total Marks	800		

# **Objective**

To enable a student to independently conceptualize and develop a landscape architectural project with a policy and/design level proposal for the same.

#### **Course contents**

- 1. Each student is required to select an independent study, with reference to a special topic in Landscape Architecture, before the end of third semester in consultation with the faculty members.
- 2. Identification of the project with its significance, scope and limitations
- 3. Programming research related to the project and evolving the project brief
- 4. Preparing a project proposal and presenting it in graphical and textual format.

#### Sessional/Term Work

The work will be in the form of necessary drawings to explain the project and its details. A comprehensive report of the project and the related study, will be submitted which will include the above drawings.

#### **Sessional Assessment**

The sessional work as stipulated above will be assessed internally and externally with equal weightage of 300 marks each for sessional work along with external jury of equal weightage of 100 marks each for Viva – voce and a consolidated list of both will be submitted to the university.

# **Recommended Readings**

All books/ Journals/ Magazines/ unpublished/published research/websites related to the topic selected by the individual student.

RESEARCH II			
Subject Code -			
Teaching Scheme		<b>Examination Scheme</b>	
Hours / Week	5	Paper	Nil
Lectures/ week	1	Term work	Nil
Studio Periods/ week	7	Sessional (Internal)	100
		Sessional (external)	100
Total Contact Periods/ week	8	Oral (Internal)	Nil
		Oral (External)	Nil
<b>Total Credits</b>	5	Total Marks	200

To enable the student to undertake a methodical research on a topic in landscape architecture and to communicate it through technical writing

#### **Course contents**

The subject deals with selecting an appropriate topic (the topic for the researchcould be selected in a such way that it could help to develop an appropriate methodology and research approach related to the Landscape Architectural Project taken up in semester-IV) from the field of landscape architecture or allied disciplines, for its theoretical exploration.

# Sessional/Term Work

Research dissertation shall be prepared by each student, based upon the topic approved by the institute in around 5000 words, in a format specified by the university.

#### **Assessment**

The sessional work as stipulated above will be assessed internally and externally with equal weightage of 100 marks each for sessional work and a consolidated list of both will be submitted to the university.

# **Recommended Readings**

All books/ Journals/ Magazines/ unpublished thesis related to the topic selected by the individual student.