

TO BE BROUGHT IN FORCE FROM ACADEMIC SESSION 1989-90 i.e. JUNE 1989.  
SECOND YEAR EXAMINATION IN ARCHITECTURE (S.Y.B.ARCH.) SEMESTER III

Admission : A candidate who has completed the course of Semester I and Semester II and cleared the examinations of Semester I and Semester II as per University rules of passing in force will be permitted to enter upon the course for Semester III.

Rules of Examination : A candidate for being eligible for admission to the Semester III examination in Architecture should have kept attendance and prepared the Sessional work of III Semester of one academic term in a College of Architecture in the III Semester of Second Year Course to the satisfaction of the Principal of the College.

To pass this examination a candidate must secure forty percent of the full marks in Theory paper and fifty percent of the full marks in the Sessional work both forming independent subject heads.

A candidate who has obtained passing marks as mentioned above may at his option, be excused from appearing in that subject at a subsequent examination and will be declared to have passed the whole examination when he has passed in the remaining subject heads of the subsequent examination in accordance with the rules of passing the examination.

Detailed Syllabus : Second Year Bachelor of Architecture Degree Course  
 (S.Y.B.ARCH. ; SEMESTER III)

01. ARCHITECTURAL DESIGN II (S.Y.B.ARCH. SEM.III)

Paper : 100 Marks - 6 hrs.  
 Sessional Work : 100 Marks

Lecture Periods - 1 per week  
 Studio Periods - 7 per week

Objective : To help students identifying the multiple function single use and multiple use architectural design problems and conceiving and presenting the appropriate solutions based on the related knowledge acquired.

Course Outline :

1. Study and use of design data i.e. spatial requirements of different activities.
2. Multi functional space - concept, analysis and design.
3. Identifying inter-relationship of functions in a building.
4. Organisation of spaces in a building in terms of their, micro climatic and functional requirement.
5. Design of buildings involving multiple functions and uses. Preferably ground storied structure e.g. small residences, panchayat office, kinder garden etc. Minimum two design projects to be executed.

Recommended reading :

01. A.J.Metric Handbook
02. Tropical Architecture by Drew-Jane & Fry
03. Planning by E & OE
04. Housing Climate & Comfort by Evan
05. Periodicals and Journals.

02. AESTHETICS AND APPRAISAL I (S.Y.B.ARCH. SEM.III)

Paper : Nil  
Sessional Work : 50 Marks

Lecture Periods - 1 per week  
Studio Periods - 1 per week

Objective : To help student understand the genesis of 'Architectural Form' as a derivative of principal visual components of 'built environ' like 'Form' and 'Colour' composed along accepted pertinent norms of visual aesthetics so as to develop in him a well-informed aesthetic judgement on visual merits of 'Architectural Form'.

Course Outline :

- Understanding the human perception of 'Form' and Colour as
- Form :
- i) Understanding for critical appraisal the visual perception of 'Architectural/Built form' in terms of 'Visual elements' and 'Visual Qualities' as follows -
    - a) Visual elements - Point, line, surface and opening
    - b) Visual Qualities - Mass, proportion, symmetry balance and contrast.
  - ii) Understanding accepted principles and systems for moderating 'Form' into patterns and compositions leading to the understanding of accepted terms of 'Visual order'.
- Colour : Understanding for critical appraisal accepted theories, properties, classificatory and design schemes of colour and understanding the effects of light, surround and psychological motives on 'Colour'.
- Note : The minimum sessional work to be conducted in the form of written journal and/or drawing plates per student as per course material.

ed

Recommend/reading :

01. Design Fundamentals in Architecture by V.S.Pramar
02. The use of colour in interiors by A.P.Halse.

03. ARCHITECTURAL DRAWING AND GRAPHICS III (S.Y.B.ARCH. SEM.III)

Paper : 100 Marks - 3 hours  
Sessional Work : 100 Marks

Lecture Periods - Nil  
Studio Periods - 6 per week

Objective : To acquaint students in three dimensional representation of object in graphics through enhancement of projections. To develop understanding about three dimensional graphic language for communication and presentation.

Course Outline :

a) Perspective Drawing : Historical Background regarding techniques of drawing perspectives. Principles of perspective Drawing. Study of Definitions, Picture Plane, Central Visual Ray, Vanishing Parallel, Eye-level, Height line, Vanishing points. Systems and Methods of Perspective Drawing - One point, two points, three points perspectives. Types of perspectives - Interior & Exterior perspectives. Application of the above to the Architectural Design Solutions. Sessional work covering all the above aspects in the form of drawings.

- Sheet : 1. Perspectives of parallel, vertical, horizontal, straight, polygonal and circular planes.  
" 2. Perspectives of simple solid geometrical forms.  
" 3. Perspectives of composite geometrical forms.  
" 4. Perspectives of buildings (at least one will be of Architectural Design Solution)  
" 5. Perspective presentation techniques.

b) Sciography : Principles of shades and shadows. Techniques of drawing shades and shadows of lines, planes solids and architectural elements. Pencil shading and colouring using transparent and opaque colours. Study of Drawing shadows in Isometric view and perspective. Sessional Work covering all the above in the form of drawings.

The sessional work consists of following ..

- Sheet 1. Shades and shadows of point, line and planes.  
" 2. Shades and shadows of parallel lines and planes.  
" 3. Shades and shadows of planes - partly on ground/horizontal plane and partly on vertical plane/elevation.  
" 4. Shades and shadows of solid geometrical objects on vertical, horizontal and partly vertical and partly horizontal planes.  
" 5. Shades and shadows of buildings - on elevation and plan One project shall be related to respective design solution.

Recomended readings :

01. Architectural Graphics - by C. Meslie Martin
02. Rendering with pen and ink by Gill Robert
03. Applied perspective - Holmes John M.
04. Perspective for the Architects - Themes & Hadson
05. Step by step perspective drawing + for Architects draftsmen and engineers - Claudius Coulin.
06. Professional perspective drawing for architects and engineers- Friedrich W. Capelle
07. Interior perspective in architectural design - Graphic Sha Publishing Co. Ltd. Japan
08. Modern architectural Rendering best 180 Japan Publishing Co.
09. Perspective Drawings of Modern Architecture
10. Air brushing in rendering

04. BUILDING TECHNOLOGY AND MATERIALS III (S.Y.B.ARCH. SEM.III)

Paper : 100 Marks - 3 hrs.  
Sessional Work : 100 Marks

Lecture Periods - 2 per week  
Studio Periods - 5 per week

Objective : To study and apply the principle of complex building elements in building technology.

Course Outline :

- a) Concept of point load and suitable foundation for point load. Foundations for sloping sites. Timbering and strutting.
- b) Cement concrete block masonry with solid or hollow blocks, soil stabilised blocks, mud masonry.
- c) Brick vaults and domes, concrete lintels, arches and weather sheds.
- d) T.W. Panelled, Glazed, Glazed and Panelled Windows and doors.
- e) More about timber flooring, Specialised timber flooring such as dance floors, sportshall floors.
- f) More about timber trusses. Use of steel, wood and concrete to form composite section and use of same in more complex situations. Fixing of A.C., G.I. Sheets etc.

Materials : Cement mortar and lime mortar. Pointing to stone and brick masonry. Plastering - Internal plaster with neeru finish external plaster sandfaced, rough cast, pebble dash. Damp proof Course - Different materials and their application. Paints - Paints for interior and exterior plastered surfaces. Painting on new and old metal surfaces Paving - Natural Stone, cutstone, cobble stone, flagstone, (Shahabad, Cudappa, Kotah, Marble, Granite etc.) IPS Finish Concrete-type of aggregates, mixes, strength, testing etc.

The sessional work consists of following full imperial size drawings.

1. Foundation - 1 plate
2. C.C. Block masonry, brick vaults, domes, concrete, lintels, arches and weather shed - 1 plate
3. T.W. Doors and Windows - 2 plates
4. Timber, Flooring - 1 plate
5. Timber Trusses - 1 plate

above including

Note : Sketches, notes etc. on all topics covered / building materials

Recommended reading :

01. Construction of building vol.I to V by Barry
02. Construction Technology vol. I to IV by R.Chudley
03. Building Construction Illustrated by Ching Francis D.K.
04. Vasturachana by Sane वास्तुसूत्रना लेखक श्री. साने
05. Engineering Materials by Chaudhary
06. Civil Engineers' hand book by Khanna

05. ENGINEERING III (S.Y.B.ARCH. SEM.III)

Paper : 100 Marks  
Sessional work : 50 Marks \*

Lecture Periods - 4 per week  
Studio Periods - 1 per week

(\* Sessional work marks to include class test of 20 Marks and shear force and bending moment diagrams of continuous beams in the form of drawings 15 Marks and viva voce at the time of examination 15 Marks total 50 Marks)

Objective : To acquaint students in working out theoretically a stress strain conditions of structural elements.

Engineering III (S.Y.B.ARCH. SEM.III) Cont.

Course Outline :

1. Deflection in simply supported beams and cantilevers (i) Double integration method (Problems of Full, Uniformly distributed load and point load only).
2. Concept of statically indeterminate structures. Degree of Indeterminacy.
3. Propped cantilevers : Standard loadings.
4. Fixed and continuous beams : Theorem of three moments (without settlement of supports) Application with Full Uniformly distributed load and point load upto three spans.
5. Moment distribution method (without sway)
6. Short and long columns : Euler's formula (without derivation of formula)

Recommended Readings :

01. Strength of Materials by R.S.Khurmi
02. Calculations, Design and Testing of Reinforced concrete by K.L.Rao
03. Analysis of structures by V.N.Vazirani & M.M.Ratwani
04. A Text book of R.C.C. Design by Deshpande R.S.
05. Treasure of R.C.C. Design by Sushil Kumar.

---

06. SURVEYING AND LEVELLING I (S.Y.B.ARCH. SEM.III)

Paper : 50 Marks - 2 hrs.  
Sessional Work : 50 Marks

Lecture Periods - 1 per week  
Studio Periods - 2 per week

Objective : To acquaint students in the physical survey work of open space and buildings.

Course Outline :

- 1 Introduction to surveying and levelling for building project
2. Reading information on drawings and maps as prepared by land and records departments.
- 3 Methods of surveying - a) Chain surveying, principles and methods. b) Chain and compass surveying c) Plane table surveying. Merits and demerits of various methods, Errors in Plane table surveying a) Field work of given property and preparation of maps by different methods as mentioned above b) Determination of areas of irregular figures by using trapezoidal & Simpson's rule and by planimeter.

The sessional work consists of following (based on the field work) (i) Chain & Cross staff survey of a given area (ii) Chain and compass survey of a given area (iii) Plane table survey of a building (iv) Determination of an area of a given irregular figure by planimeter.

Recommended reading :

01. A Text book of surveying & levelling by R.S.Deshpande
02. Surveying and levelling Part I & II by Kanetkar T.P. & Kulkarni J.V.
03. Concise practical surveying by Lane R.F. and Cartin W.C.
04. Surveying by Raymond S. and Banister A.

07. CLIMATOLOGY (S.Y.B.ARCH. SEM.III)

Paper : 50 Marks - 2 hrs.  
Sessional Work : 50 Marks

Lecture Periods - 3 per week  
Studio Periods - Nil

Objective : To help student understand the use of surrounding environment as one of the strategic design parameters with respect to human comfort and energy conservation.

Note : Theory and sessional work will be performed and marked per student and in the sequential order as prescribed in not more than four sheets.

Course Outline :

1. Introduction to climate as a factor of human shelter comfort and environment and its classification v/z Global, Macro and Micro climate. Preparation of sketches showing earth sun relationship and atmospheric depletion. Understanding of maps showing of ocean currents, wind movement patterns and wind shifts with respect to seasonal changes.
2. Study, measurement and analysis of climatic elements and use of climatic instruments for a building designer. Study and analysis of tropical climates. Preparation of sketches of measuring instruments and evolution of regional dwelling units.
3. Study of heat exchange processes between human body and its surrounding with respect to comfort factors. Study of heat exchange processes between building envelope and its surrounding in static and dynamic conditions methods of calculations and use of technical tables. Preparation of bioclimatic chart superimposing the extension of comfort zone with respect to climatic conditions for tropical climate.
4. Design strategies for tropical climates with respect to climatic elements, site landscape planning, orientation, openings building materials and shading devices. Study of solar control with reference to sun movements and methods of calculating the sizes of vertical and horizontal shading devices with the help of shadow angles and solar protractor.

Recommended reading :

1. Climatology Fundamentals and Applications by John R. Mather
2. Introduction to Building Climatology by Antony Sealey
3. Climatological and Solar Data for India by Sheshadri T.N. & Rao K.R.
4. Climatic Design by Watson Donald and Labs Kenneth
5. Manual of Tropical Housing and Building by Koenigsberger and Ingersoll
6. Tropical architecture by Maxwell Fry and Jane Drew.

08. HISTORY OF ARCHITECTURE AND HUMAN SETTLEMENTS II (S.Y.B.ARCH. SEM.III)

Paper : 50 Marks - 2 hrs.  
Sessional Work : 50 Marks

Lecture Periods - 3 per week  
Studio Periods - Nil

Objectives : Study of culture and Architecture of western Countries with broad reference to formative influences of major Architectural contribution in terms of themes in building types planning and urban design of following specific periods and historic buildings and towns.

Course Outline :

Periods	Building types and examples
EARLY CHRISTIAN & BYZANTINE	<u>Churches</u> : St.Peter (Old), Rome; St.Sophia Constantinople
ROMANESQUE	<u>Churches</u> : Worm's Cathedral Campanile at Pisa (S.Michele, Favia)
GOthic	<u>Cathedrals</u> : Salisbury, Rheims, S.Elizabeth Malburg. <u>Monastery</u> : Fountains Abbey <u>Parish Church</u> : St.Andrews, Hekington <u>Manor House</u> : Penhurst place, Kent; Oxburgh hall; compton Wy Wyayates; <u>Chateau, Castles</u> : Stoksay; keep; work worth. <u>Small houses Hospital</u> : S.Mary, Chichester <u>Commercial Bldgs.Towns</u> : Carcassonne Noerdlingen Mont Paziér/Mr.Michel.
RENAISSANCE	<u>Palazzo</u> : Riccardi, Florence; Municipio; Genoa Doges, Venice, <u>Chateau</u> : Chambord <u>Tomb</u> : Dome of the Invalides, <u>Church</u> : Pantheon, Paris; S.Peter, Rome St.Pauls, London; <u>Dwellings and mansions Works of individual Architects</u> : a) Palladio - Villa Capra; S.Georgia b) Michel Angelo - The Capital Rome c) Inigo Jones - Queen's House, Greenwich Greenwich Hospital. d) Christopher wren - city churches.

\* Note : Sketching in examination will be restricted to the specific Architectural examples cited above.

Recommended Reading :

1. History of Architecture, Sir Bannister Fletcher
2. Urban Pattern, Gallion
3. Towns in making

09. WORKSHOP III (S.Y.B.ARCH. SEM.III)

Paper : Nil  
Sessional Work : 50 Marks

Lecture Periods - Nil  
Studio Periods - 3 per week

Objective : To develop students ability of preparing scaled models. as an aid to develop visualisation of Architectural volumes and Design concepts.

Course Outline :

1. Introduction to Architectural Models.
2. Necessity of making architectural models to different scales.
3. Equipments of model making - machines - hand driven and power driven. their introduction and use.
4. Materials used for modelling like mount board, cork sheets, plaster of paris, wood etc.
5. Illumination of building details depending on the scale of model.
6. Making baseboards of models.

Workshop III (S.Y.B.Arch. Sem.III) Contd.

At least one model will be prepared by the candidate of their Architectural Design II solution and one model of the Building Technology Topic.

Recommended Reading :

1. Model Building for Architects & Engineers by John Taylor
2. Architectural Models by Rolf Janke.



SECOND YEAR EXAMINATION IN ARCHITECTURE (S.Y.B.ARCH.) SEMESTER IV

Admission : A candidate who has completed the course of Semester III by attending one academic term of Semester III will be permitted to enter upon the course of Semester IV.

Rules Of Examination : A candidate for being eligible for admission to the Semester IV examination in Architecture should have kept attendance and prepared Sessional Work for Semester III and IV in a College of Architecture to the satisfaction of the Principal of the College.

To pass the Semester IV examination a candidate must secure forty percent of the full marks in theory paper and fifty percent of the full marks in the Sessional Work both forming independent subject heads.

A candidate who has obtained passing marks as mentioned above may at his option be excused from appearing in that subject at a subsequent examination and will be declared to have passed the whole examination when he has passed in the remaining subject heads of the examination in accordance with the rules of passing examination.

Detailed Syllabus : Second Year Bachelor of Architecture Degree Course (S.Y.B.ARCH. : SEMESTER IV)

01. ARCHITECTURAL DESIGN III (S.Y.B.ARCH. SEM.IV)

Paper : 100 Marks - 9 hrs.  
Sessional Work : 100 Marks

Lecture Periods - 1 per week  
Studio Periods - 8 per week

Objective : To acquaint students to complex relationships of functions in a building and conceiving and presenting the appropriate solution based on the related knowledge acquired.

Course Outline :

1. Data collection and analysis of site conditions for individual building and campuses with reference to topography, macro & micro climate and landscape.
2. Three dimensional thinking and approach to analysis and solutions for a building using plan and section as tools to design.
3. Analysis of mixed use buildings and vertical circulation of not more than two stories such as Shops & residences, Apartments, Hostels etc.
4. Importance of Aesthetics in Architecture & evolution of stylistic design.
5. Introduction to the designing of interior spaces of the above designs using walls, ceilings and circulation as planning elements and use of colour, texture and materials in interior spaces. Minimum two Design projects to be executed.

Recommended reading :

1. As mentioned for Architectural Design II
2. Design Fundamentals by Pramart
3. Structure in Architecture by Salvadori
4. Library of contemporary Architects - Series
5. Interior Design - by Friedmann, Pile Wilson  
Interior spaces Designed by Architects. - A.R. Book  
The use of colour in interiors - by Halse.

02. AESTHETICS AND APPRAISAL II (SEMINARS) (S.Y.B.ARCH. SEM.IV)

Paper : Nil  
Sessional Work : 50 Marks

Lecture Periods - Nil  
Studio Periods - 3 per week

Objective : To develop in student a written and spoken expression of critical appraisal of 'Architectural form'.

Course Outline :

Presenting verbally with prior written synopsis and whatever suitable aids one's own critical appraisals of at least 2 local buildings of sufficient complexity and contribution, in architecture. The appraisal should be specifically made in the light of topics covered vide subjects 'Design Fundamentals in Architecture I & II' and Aesthetics and Appraisal I and as per 'Course Material'.

Notes : The Sessional work in this subject will be worked individually per student after presentation of written synopsis and verbal appraisal (not more than 10 minutes.)

The institutions will store the synopsis sheets for assessment by external examiners and the candidate will be additionally assessed at Viva-Voce by internal and external examiners.

Recommended reading :

01. As mentioned for Aesthetics and Appraisal I
02. Architectural Journals.

03. ARCHITECTURAL DRAWING & GRAPHICS IV (S.Y.B.ARCH. SEM.IV)

Paper : 100 Marks - 3 hours  
Sessional Work : 100 Marks

Lecture Periods - 3 per week  
Studio Periods - 5 per week

Objective : To acquaint students in three dimensional representation of object in graphics through enhancement of projections. To develop understanding of more knowledge about three dimensional graphic language for communication and presentation.

Course Outline :

a) Presentation drawings : Composition of drawing (layout on paper) Rendering of perspectives, Plans & Sections using ink, pencil, water colours oil/wax pastels etc.

b) Photography : Use of photography for architects, Camera, Film, light exposure techniques. Techniques of recording a building on film. Use of photographs in architectural design and presentation.

c) Computer aided drawing : Introduction to computer - Hardware, software applications & interfaces. Operating system - software packages. Graphics on computer - advantages, limitations. Actual use - practicals using AutoCAD Drafting packages. Introduction to computer aided design.

d) Perspective and sciography : Perspective Drawings of Architectural Design solution. Shades and shadows of Architectural Design solutions.

Recommended reading :

01. As mentioned for Architectural Drawing and Graphics III

04. BUILDING TECHNOLOGY AND MATERIALS IV (S.Y.B.ARCH. SEM.IV)

Paper : 100 Marks - 3 hrs.  
Sessional Work : 100 Marks

Lecture Periods - 2 per week  
Studio Periods - 5 per week

Objective : To study and apply the principle of complex building elements in building technology.

Course Outline :

1. Concept of bulb of pressure, Foundation for low load bearing soils such as grillage etc.
2. Fencing in different materials such as barbed wire, chainlink weldmesh, crimped mesh etc. using angle iron or concrete post Entrance gates.
3. Introduction to R.C.C. frame structure with columns, footings plinth beams, floor beams slabs etc.
4. Timber framed structures of purely temporary nature such as cow shed, grain store, onion store etc. with anti-termite and rat-proof construction.
5. Various roofing and flooring systems developed by CBRI roorkee.

Materials : Study of structural and reinforcing steel. R.C.C. - mix proportion, aggregate size, cover striking time, concrete cubes and testing. Formwork to various R.C.C. members. Paving - Cement tiles, mosaic tiles, terrazzo tiles, ceramic tiles etc.

The sessional work consists of following full imperial size drawings.

1. Fencing - 1 plate
2. R.C.C. frame structure - 2 plates
3. Timber framed structure - 1 plate
4. Roofing and flooring systems developed by C.B.R.I. - 1 plate

Note : With notes, sketches etc. as all topics covered and building materials.

Recommended reading :

01. Construction of building vol.I to V by Barry
02. Construction Technology Vol.I to IV by R.Chudley
03. Building Construction Illustrated by Ching Francis D.K.
04. Vastuachana by Sane वास्तुचरना लेखक श्री. साने
05. Engineering Materials by Chaudhary
06. Civil Engineer's hand book by Khanna.

05. ENGINEERING IV (S.Y.B.ARCH. SEM.IV)

Paper : 100 Marks - 3 hrs.  
Sessional Work : 50 Marks \*

Lecture Periods - 2 per week  
Studio Periods - 2 per week

(\* Sessional work marks to include class test of 20 Marks and shear force and bending moment diagrams of continuous beams in the form of drawings 15 Marks and viva voce at the time of examination 15 Marks total 50 Marks)

Objective : To acquaint students in the critical analysis of structure

ENGINEERING IV (S.Y.B.ARCH. SEM.IV) Contd.

Course Outline

1. Loads : Dead, live wind and earthquake
2. Analysis and Design of simple beams : Timber and Fitched in details.
3. Elements of concrete technology introduction of R.C.C. : Materials, proportions, Requirements like curing etc. for strength.
4. Analysis and design of single reinforced R.C.C. sections using mild steel and torsteel bars : R.C.C. Beams - Simply Supported and cantilever, one way and two way simply supported slabs and cantilevered slabs.
5. Analysis and design of masonry walls and pillars.
6. Analysis and design of axially loaded R.C.C. Columns.
7. Analysis and design of Single storeyed load-bearing structure with single span R.C.C. slab, beams, lintels and weather sheds.

Recommended Reading :

Same as mentioned for Engineering III

06. SURVEYING & LEVELLING II (S.Y.B.ARCH. SEM.IV)

Paper : 50 Marks - 2 hrs.  
Sessional Work : 50 Marks

Lecture Periods - 1 per week  
Studio Periods - 2 per week

Objective : To acquaint students in the process of ascertaining ground configuration through levelling methods and depicting the same on two dimensional drawings.

Course Outline :

1. Purpose and importance of levelling readings and preparation of contour maps, symbols, bench marks, temporary adjustment
2. Measurements of elevations - levels, <sup>simple differential</sup> recording in level field book. Reduction of levels by collimation planes and rise & fall methods Fly levelling, check levelling, profile levelling, cross sectioning reciprocal levelling. Contours methods of contouring, characteristics and uses of contour maps.
3. Theodolite : Use of theodolite, least count, verniers temporary and permanent adjustments, measurements of horizons by repetition and reiteration method. Measurement of vertical angles lining-in prolonging a given line, checking verification etc.

Notes: The sessional work consists of following  
(Based on field work) (i) Profile levelling and crosssecting about 90 M length (ii) Block contouring of a given area (minimum size 60 M X 60 M) (iii) An exercise on the computations of a height of building/TV tower etc. by using a theodolite.

Recommended Reading :

01. A text book of surveying & levelling by R.S.Deshpande
02. Surveying and levelling Part I & II by Kanetkar T.P. & Kulkarni J.V.
03. Concise Practical Surveying by Lane R.F. and Cartin W.C.
04. Surveying by Raymond S. and Banister A.

07. HISTORY OF ARCHITECTURE & HUMAN SETTLEMENTS III (S.Y.B.ARCH.SEM.IV)

Paper : 50 Marks - 2 hrs.      Lecture Periods - 3 per week  
 Study Sessional Work : 50 Marks      Studio Periods - Nil

Objective : Study of culture and Architecture of India with broad reference to formative influences and major Architectural contribution in terms of themes in building types planning & urban design of following specific periods and building types and towns.

Course Outline :

<u>Period</u>	<u>Building types/Examples</u>
INDUS VALLEY	Town : Mohen-jo-daro
VEDIC PERIOD	, village patterns
BUDDHIST	Stupas : Sanchi, Chaitya : Karla, Vihar
	Monastery : Nalanda
HINDU : EARLY CHALUKYAN	Temples : Kailas, Ellora (Verul)
DRAVIDIAN	Rathas : Mamalla Puram Temple : Meenakshi
	Madurai, Town : Srirangam
EARLY ARYAN	Temple : Lingraj, Kanderiya Mahadeo, Sun Modhera
LATE CHALUKYAN	Temple : Somnathpur, Belur
JAIN	Temple : Vimal Shah, Vastupal - Tejjal - Ahy;
	Vastupal-Tejjal Girner Chaumukh-Ranakpur
ISLAMIC : PATHAN/IMPERIAL	Mosque : Quat-Ul-Islam, Khirki Masjid
	Tomb : Iltumush, Mubarak Shah, Madarsa :
	Hauz Khas.
	Mosque : Jami, Ahmedabad; Jami, Gulbarga
	Tomb : Said Usman, Gol Sher Shah
	Suri, Ibrahim Rouza, Civic Architecture :
	Dada-Halis Well, Adalaj
	Mosque : Jami, Sikri; Jami Delhi, Tombs :
	Humayun, Akbar, Iqbal-ud-Daula, Tajmahal
	Fort Palaces : Red fort, Delhi, Fatehpur
	Sikri, Royal buildings : Sunhara Makan
	Bitbal house, Panch Mahal, Diwan I Khas
	Jodhabai's Palace, Sikri, Jahangir Mahal
	Agra, Hindu Palaces : Jahangir Mahal Orchha
	Palace at Datia, Town : Jaipur, Jaisalmer,
	Shahjahanabad.

Recommended Reading :

1. Indian Architecture (Buddhist & Hindu) by Perry Brown
2. Indian Architecture (Em Islamic Period) by Perry Brown
3. Living Architecture (Indian) By Andreas Volwahren
4. Living Architecture (Islamic Indian) By Andreas Volwahren
5. The Design development of Indian Architecture by Clande Batley
6. Indian Architecture by E.B.Havell
7. Indian Architecture through ages E.B.Havell
8. History of Indian and Eastern Architecture Vol.I & II by Ferguson

08. LANDSCAPE DESIGN I (S.Y.B.ARCH. SEM.IV)

Paper : 50 Marks - 2 hrs.  
Sessional Work : 50 Marks

Lecture Periods - 2 per week  
Studio Periods - 1 per week

Objective : To make the students understand the importance of Ecological balance, through landscape design for built environment.

Course Outline :

1. Introduction to landscape Architecture.
2. History - Development of landscape Architecture through Ages.
3. Different specific conditions for plant growth.
4. Requirements of plant growth.
5. Identification of minimum ten species of large trees, shrubs, ground covers, and conditions for growth of ground covers.
6. Ecological aspect of landscape design. Studio work to include preparation of Herbarium related to their area of application and one imperial sheet, drawing showing landscaping of their Architectural Design Project.

Recommended Reading :

1. Landscape Architecture by John Simonds
2. Earthscape
3. Landscape for living by Garrett Eckbo
4. Introduction to landscape Architecture Ian Laurie
5. Flowering trees of India - Randhawa
6. Journals on landscape Architecture.

---

09. WORKSHOP IV (S.Y.B.ARCH. SEM.IV)

Paper : Nil  
Sessional Work : 50 Marks

Lecture Periods - Nil  
Studio Periods - 2 per week

Objective : To develop students ability of preparing scaled models as an aid to develop visualisation of Architectural volumes and Design concepts.

Course Outline :

1. Application of Colours to Models.
2. Making of trees, Human figures and other artifacts related to model
3. Denoting of contours.
4. Models depicting interiors.

At least one model will be prepared by the candidate of the Architectural Design solution topic.

Recommended Reading :

1. Model Building for Architects & Engineers by John Taylor
2. Architectural Models by Rolf Janke.