SEMESTER – III

AR - 211 Design-III

1. **The aim of the course is to emphasis and evolve the methodology for architectural design with reference to the previous knowledge of function and aesthetics. The design should highlight the clear approach to the design with idea (concept), analysis, synthesis and clarity of details and architectural expression with use of appropriate graphic presentation techniques.**

2. **The design should be done with a sensitivity towards surroundings i.e. traditional and vernacular architecture, construction techniques and environment.**

3. **The problems should include the small design exercises of nursery school, restaurants, small nursing homes, small offices, exhibition pavilions, canteens, kiosks etc.**

4. **One time problem is to be attempted of 12 hrs. duration in class other than regular design problems.**

Note: **The sessionals will be in the form of drawings and models along with Technical report for the design dealt. The evaluation should be done in intermediate reviews consisting of internal and external experts. There should be regular site visits to buildings dealt in studio problems. Documentation with the help of photographs, slides, video etc.**

AR -212 Graphics-III

1. **Introduction to basic understanding of application software, such as Auto cad, Revit, Archicad.**

2. **Advance Computer Aided Architecture Drafting (in various projections).**

3. **Architecture or allied project presentation technique.**

4. **Graphical analysis of development project through computer.**

5. **3-D modeling, animation and advance rendering techniques with the help of computers.**

Note: Sessionals should be in the form of small exercises and written assignments.

AR - 213 Building Construction –II

1. **Timber floor: single, double and triple.**

2. **Timber roofs: flat, lean to type, couple, close couple.**

3. **Trussed roof (timber) king post, queen post; built up truss (timber and concrete as per C.B.R.T).**

4. **Balconies, stairs and canopies (timber).**

5. **Built in fittings & furniture: Wardrobe, cupboard, shelf, show-cases in houses.**

Note: **i) There should be regular site visits to buildings under construction or constructed to explain the above topics. Use of audio-visuals should be stressed.**

ii) Minimum 8 sheets shall be prepared out of which two may be in sketch form (scaled).

AR - 214 History of Arch-II

This course is studied in order to see how builders in past solved their structural, functional and aesthetic problems. This survey of history gives the student a chance to study the structural basis of great styles, methods of admitting day light, decoration. Importance is also attached to the sociological background i.e. political, economic, religious, technical and philosophical ideas which lie behind all buildings. This will be studied with the help of selected examples of buildings of various historical civilizations in Europe the west in chronological order.

1. **Greek, Roman**
2. **Early Christian, Byzantine**
3. **Medieval (Romanesque, Gothic)**
4. **Renaissance**
5. **Impact of Industrial revolution (upto 1942)**

Note: Sessionals will be submitted in the form of sketches (minimum say 20) notes, audiovisuals and reports of site visit to some historical buildings etc. as per program scheduled by the school per session.

AR -215 Structure-III

1. Steel work connections: Riveted connections, Bolted and pinned connections, Welded connections.

2. Design of Tension members: Types of tension members, permissible stresses, Design of members subjected to axial tensions and bending. Tension splices, lug angles.

3. Design of compression members: Types of compression members, failures, end conditions, effective length, design by I.S. Code method. Strength of compression members, splices, encased columns.

4. Design of flexural members: Beams simple and built up, plate girder, criteria of design, design of laterally supported and laterally unsupported beams.web crippling and web buckling.

5.Design of roof trusses: To determine the forces in members due to various loads, types of roof trusses, components of roof trusses,purling,lateral bracing of end trusses, roof covering.

Note: i) Sessional work should include design and analysis of simple elements as stated above with drawings.

ii) Steel table & I.S. code 800 is permitted in examination.

AR-216 Theory of Design

1. **Studies of folk art and crafts, indigenous architectural studies, influence of tradition, culture and socio-economic developments on art and architecture. Introduction to inquiries initiated by various Western and Indian philosophers.**

2. **Understanding of determinants of physical form such as concepts of space, structure, organization, symbolism, mass, surface scale, order, proportion, rhythm, datum, axis, etc. in relation to place, time and society with due consideration for perceptual qualities as affected by colors, light conditions, vision angle etc.**

3. **Communication and interpretations in architecture. The eloquence, aptness and style in architecture, their judgment and design.**

4. **Development in world architecture, environmental design and technology with reference to trend setting works of architects, designers, ecologists, engineers etc.**

5. **Design parameters, principles, process, methods and program formulation. Design, matrices and system integration. Process of design synthesis.**

Note: The sessional should be in the form of drawings technical report writing and presented in the seminar along with the audio visuals which will be based on buildings identified during regular site visits.