L J School of Architecture

Syllabus for B.Arch. 2019-20

Second Year | Semester 3

Subject Code: 302 | Subject: Building Construction & Technology III | Credit: 04

Course Content:

- Understanding of different types of flat roof construction in different materials: Brick: Jack arch RCC:
- One way and two way slabs Basic understanding of vernacular flat roofing systems in the country in mud, stone and brick
- Basic understanding of all kinds of sloping roofs in different materials: Lean-to, couple, closed couple, collar, scissor. Detailed study of simple roof trusses: King Post Queen Post
- Different types of roofing materials such as GI sheets, fibre glass, aluminum, polycarbonate, clay tiles, coir-based corrugated sheets etc. along with water proofing materials for roofs such as asphaltic sheets, kapchi finish etc.
- Fixing details of roofing material to structural system.
- Fixing details at ridge and gutter

Methodology:

• Lectures, Studios, drafting, case-studies, sketching, Site visit, Model making, presentation, group work.

Reference:

- 1. Building Construction W. B. Mckay Vol. I, II, III, IV
- 2. The Construction of Building R.Barry Vol, I, II, III
- 3. Building Structures Illustrated: Patterns, Systems and Designs Francis D.K. Ching