

SUBJECT NAME – ADVANCED CONSTRUCTION TECHNOLOGY

SUBJECT CODE – 3346202

FOCUS:

To study the construction systems of roofing for large span and complex buildings. To study construction systems with focus on modern & contemporary building elements. Understanding of specialized construction system

CONTENTS:

- Materials and Construction Technology for large span structures(Temporary/Permanent):
 - Modular unit system
 - Space frame system
 - Tensile structures
 - Shell structures, folded plate, geodesic domes
 - Pneumatic structures
 - Flat slab
 - Waffle slab
 - Cofferslab
- PVC & FRP, frameless glass doors and windows and partitions. Wooden/ steel/ Aluminum sliding and folding doors and partitions.
- Steel doors for garages and workshops.
- Remote control systems of doors and gates.
- Structural glazing, aluminum composite panel. Cladding
- Understanding of Precast and Prestressed concrete components and their applications in building /construction industry.

- Plastics – types, properties and uses of plastics such as polycarbonates, acrylics, PVC polymer films, fiber reinforced plastic. Rubber and Asbestos cement products. Water proofing elements, construction chemicals and additives, adhesives, plaster of Paris, gypsum, Polystyrenes, sealants.
- Glass – its types like plate, tinted, decorative reinforced, laminated glass block, fiber glass, glass murals, partially colored glass, etching of glass and its applications in building industry for both exterior and interiors, functional and decorative, and fixing details.

SUGGESTED BOOKS

- Construction Technology by Chudley
- Construction of Buildings by Barry
- Building construction by McKay
- Building construction by Frank Ching