

AR 15201 BUILDING MATERIALS II (3-0-0-0) CR-03

Module I

Laminates and Veneers Resin bonded ply wood, types of laminates, laminated wood, insulating boards and other miscellaneous boards, veneers from different varieties of timber, their characteristics and uses MDF & HDF Boards, Paints and Varnishes Protective coatings, paints, constituents of paints, their functions, water paints, distempers and cement based paints, emulsion paints, selection of paints and storage of paints, Types of Varnishes, (oil and spirit), characteristics and uses of varnishes, French polish, anti-corrosive paint, damp proofing finishes

Module II

Glass and glass products: Composition and fabrication of glass, types of glass, wired glass, fiber glass, rock wood, laminated glass, glass-crete blocks, structural glass, their properties and uses in buildings, Plastics: Polymer types, thermo setting and thermo plastics, resins, common types of mouldings, fabrication of plastics, polymerization and condensation, plastic coatings, Composite materials, classification, properties and uses, linoleum, plastic coated paper, polythene sheets, reinforced plastic, plastic laminates and PVC

Module III

Floorings: Introduction, essential requirements of a floor, factors affecting selection of flooring material, various natural as well as artificial flooring materials like brick, flag stone, tiled, cement concrete, granolithic, terrazzo, marble, shabad stones, timber flooring, timber floor supported on RSJ, flag stone floor resting on RSJ, vitrified tiles, ceramic tiles, Mosaic, rubber, Linoleum and PVC and PVA flooring, Roof Coverings Introduction, requirements of good roof technical terms, Classification, types of roof coverings for pitched roof; Roofing tiles and roofing with cement products like AC sheet roofs, GI sheets roofs, slates

Module IV

Miscellaneous materials and treatments properties and uses of Asbestos, cork, felt mica, adhesive, Bakelite, china clay, fiber glass, leather, canvass, jute, rubber, Asphalt and Bitumen, Materials for Special Treatments Fire resistant, waterproofing, thermal insulation, acoustical treatment and antitermite Treatment

Reference Books

1. Chowdary KP Engineering Materials are Used in India 7th ed Oxford and IBH Pub Ltd New Delhi 1990
2. Moxley R Mitchell's Elementary Building Construction Technical Press Ltd
3. Rangawala SC Building Construction Materials and types of Construction 3rd ed John Wiley and Sons Inc New York 1963

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA

Semester: 2nd

LESSON PLAN

Subject BUILDING MATERIALS -II

Session: Jan 2017 – May 2017

Theory / ~~Sessional~~

Branch/Course: Architecture

Name of the Faculty Member:

Period	Module/Number	Topic to be covered	Remarks/ Sign. of Faculty Member
02	1	Introduction to Laminates and Ply wood, types of laminates. Various types and uses.	Market study and Collection of material samples and catalogs.
03		Veneers from different varieties of timber, their characteristics and uses MDF & HDF Boards	
04		Introduction to Paints and Varnishes, constituents of paints.	
05		Their functions and application, factors affecting the quality of paint.	
06		Water paints, distempers and Cement based paints.	
07		Emulsion paints, selection of paints and storage of paints.	
08		Types of Varnishes, (oil and spirit), characteristics and uses of varnishes	
09		French polish, anti-corrosive paint, damp proofing finishes	
10	2	Glass and glass products: Composition and fabrication of glass, types of glass and use in building industry.	
11		Wired glass, fiber glass, and laminated glass.	
12		Glass-Crete blocks, structural glass, their properties and uses in buildings.	
13		Introduction to Plastics: Polymer types, thermo setting and thermo plastics resins.	
14		Common types of mouldings, fabrication of plastics.	
15		Plastic coatings, Composite materials.	
16		Classification, properties and uses of linoleum.	
17		Plastic coated paper, polythene sheets.	
18		Reinforced plastic and plastic laminates and PVC.	
19	3	Floorings: Introduction, essential requirements of a floor.	
20		Factors affecting selection of flooring material, various natural as well as artificial flooring materials.	
21		Types of flooring: Brick flag stone, tiled, cement concrete,	
22		Granolithic, terrazzo, marble, shabad stones, flag stone.	
23		Timber flooring, timber floor supported on RSJ,	
24		Vitrified tiles, Ceramic tiles, Mosaic flooring.	
25		Rubber flooring, Linoleum and PVC and PVA flooring.	
26		Roof Coverings Introduction, requirements of good roof technical terms	
27		Classification, types of roof coverings for pitched roof;	
28		Roofing tiles and roofing with cement products like AC sheet roofs, GI sheets roofs, slates	
29	4	Miscellaneous materials and treatments properties and uses of Asbestos, cork, Bakelite, china clay.	
30		Fiber glass, leather, canvass, jute, rubber	
31		Asphalt and Bitumen, Materials for Special Treatments: Fire resistant and waterproofing.	
32		Thermal insulation, acoustical treatment and antitermite treatment	

Signature of the Faculty Member :

Date:

Counter Signature of H.O.D.

