| USN | | | | | | 15ARC62 |
|------|--|--|---|---|---|---------|
| UDIT | | | 1 | 1 | 1 | |

Sixth Semester B.Arch. Degree Examination, Jan./Feb.2021 Materials & Methods in Building Construction – VI

Max. Marks: 100 Time: 4 hrs.

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- Explain the terms of architectural elements of glass as a building material, highlight the 1 glass material used in architecture in today's scenario. (10 Marks)
 - Differentiate in between tempered glass and laminated glass and its application. (10 Marks)

- Design a frameless glass door for a car showroom of opening size 3600×3300mm to a 2 suitable scale:
 - Plan, Elevation showing the fixture.

(08 Marks) (04 Marks)

Cross section. b.

Any two Enlarged detail.

(08 Marks)

Modu

Illustrate with neat sketches, explain the concept and fixing details of structural glazing. 3 (20 Marks)

OR

- How ACP cladding has become an architectural building material in todays trend, explain (10 Marks) with necessary sketches. (10 Marks)
 - Draw to suitable scale for any two joinery fixing detail of ACP cladding.

Module-3

- Explain with neat sketches with necessary joinery detail of UPVC windows. (10 Marks) 5
 - Sketch the joinery detail to a proportionate scale of FRP shulters fixing (any two details). (10 Marks)

A living room balcony required to provide with wooden sliding and folding door for an 6 opening of size 3600×2100, draft plan, elevation, section and any two enlarged detail with (20 Marks) suitable scale.

Module-4

Explain the principles and methods of construction for steel sliding and folding doors with (20 Marks) necessary sketches for the same.

OR

Design and detail for an aluminium partition for a car showroom office room of size 8 3600×2700 and to a height of 3000 mm. Draw the layout plan, elevation and section and (20 Marks) any two detail to suitable scale.

Module-5

An apartment requires a skylight roof covering for an open cut out area of size 4000×4000 9 design the skylight with glass covering. Draft plan, Elevation and section with two fixing (20 Marks) detail with suitable scale.

OR

- Explain the concept and methods of using of sandwich panel walls with respect to 10 a. (10 Marks) architectural interior material.
 - Sketch the joinery details of sandwich panel walls fixing detail (any two joinery detail) b. (10 Marks)

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.