## V SEMESTER B.ARCH DEGREE EXAMINATION

13 AR 1502 BUILDING MATERIALS AND CONSTRUCTION -IV MODEL QUESTION PAPER
Time: 4Hours
Max Marks: 100
Instruction: Use Illustrations wherever required. Illustrations carry due marks
Drawing sheets shall be supplied.
PART -A
Answer all questions. Each question carries 5 Marks.

1. Write short notes on the following.
a) Skin Door.
b) Cement Particle Board.
c) Escalators.
d) Planning and grouping of Elevators.
e) Wooden roof components.
f) Space frames.
g) Plasters.
h) Ingredients of paint.

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\text { (8 x5 Marks = } 40 \text { Marks) }
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2. a) Explain the production of ply wood.
b) Describe the Characteristics, physical properties and areas of application of block board.
(10 Mark)

## OR

3 a) Explain the recent developments in vertical transportation systems.
b) Make a Comparative study between Lifts and Escalators.
(10 Mark)
4. a) Explain the parameters to decide the roof slope.
b) Illustrate various types of slope roof.

OR
5. a) Describe the characteristics of an ideal paint.
b) Make a Comparative study between distempers and emulsions.
(10 Mark)

## PART - B

6. Draw the plan and section of a passenger lift of capacity 6 passengers.
(20 Mark)
OR
7. Draw the plan, section and details of a steel staircase made of tubular sections and plates.
(20 Mark)
8. Draw a wooden king post truss for a room with outer span of 650 cm ; to a scale not less than 1:50. The slope of the roof is 42 degree. The roof cover is MP tiles of standard size. Assume the sizes of members and other necessary data. Show the details of two important joints to a scale 1:10.
9. Draw a suitable steel truss for a room with outer span of 1250 cm ; to a scale not less than 1:50. The slope of the roof is 30 degree. The roof cover is corrugated aluminium sheet of standard size. Assume the sizes of members and other necessary data. Show the details of two important joints to a scale 1:10.
(20 Mark)
