

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE & PLANNING
B.Arch./ B.ID Summer 2018-19 Examination

Semester: 3**Date: 29/04/2019****Subject Code: 01101202****Time: 02:00 pm to 05:00 pm****Subject Name: Building Materials & Construction Technology – III****Total Marks: 50****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever required.
4. Draw suitable sketches wherever required.

Q.1 In a room having clear dimension of 2400mm Width x 4500mm Length x 3000mm height (including slab thickness), draw plan and longitudinal section of a Dog Legged Stair, to reach from Ground Floor to the top of First Floor slab. Scale 1: 25. **(10)**

Q.2 **Attempt any five out of following six:** **(20)**

- 1) Define Steel. Enlist and Explain briefly various market forms of Steel used in construction.
- 2) **Define the following: (any four)**
 1. Lock rail 2. Riser 3. Balustrade 4. Landing 5. Head-room
- 3) Differentiate between Louvered window and Glazed window
- 4) Differentiate the following with necessary sketches
 - i) Wall Hung WC & Floor Mount WC.
 - ii) Collapsible door and Louvered door
- 5) Explain the following with relevant sketches: (any four)
 - i) Revolving door iii) Clerestory window v) Bay window
 - ii) Battened, ledge and braced door iv) Casement window
- 6) **Explain the following briefly:**
 - i) Flush Door ii) Fully paneled door

Q.3 **Write a short note on the following: (any 05)** **(10)**

1. P, Q & S trap
2. Sanitary Fixture
3. Various elements of door with sketches.
4. Hardware Fixtures
5. Plumbing Fixtures.
6. Types of Urinals

Q.4 **Explain the following: (any 02)** **(10)**

1. Explain Door and Window. Enlist the schematic sketches of at least two types of doors and two types of windows.
2. Draw/ Sketch the Section and Elevation with detail, labeling of Double shutter adjustable louvered window.
3. Define PVC. Explain advantages & disadvantages of PVC as a building material.