

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE & PLANNING
B.Arch/B.ID., Summer 2017-18 Examination

Semester: 3

Date: 14/05/2018

Subject Code: 01101202

Time: 2:00pm to 5:00pm

Subject Name: Building Material and 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 Define Door and Window. Enlist with schematic sketches of at least four types of each. (10)

Q.2 Answer the following: (any five) (20)

a. Fill in the blanks:

- i. _____ is the intermediate horizontal framing member between the bottom and top rails in a framed door, where the lock is often fitted.
- ii. _____ is the vertical surface forming the front face of a step.
- iii. _____ is the horizontal platform or level area at the top of a flight of stairs, which may have another flight leading from it.
- iv. A mean of vertical circulation consisting of many steps from one level to another is called _____.

b. Differentiate the following with necessary sketches

- i) Push pull type rolling shutter and mechanical gear type rolling shutter.
- ii) Gable window & Dormer window

c. Explain the following:

- i) Sanitary fixtures ii) types of traps

d. Sketch the following:

- i) Dogleg stair ii) Helical stair iii) Ramp iv) Sliding folding window

e. Differentiate the following:

- i) Louvered window & Metal window ii) Glazed Door & Wooden shutter Door

f. Answer the following:

- i) Explain the various types of Urinals & WCs.

Q.3 Explain briefly the following (Any five) (10)

- a. Hardware Fixture.
- b. Types of Washbasins.
- c. Types of doors based on Material.
- d. Types water closets with sketches.
- e. Elements of door & window.
- f. Plumbing fixtures.

Q.4 Write a short note on: (Any two) (10)

- a. Materials used for manufacturing doors and windows. State advantages and disadvantages of each material.
- b. Factors to be carried out while constructing a staircase.
- c. Steel as a construction material. Explain its uses. Differentiate between Hard & Mild Steel.