

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE AND PLANNING
B. Arch. Summer 2018 Examination

Semester: 2**Date: 14/05/2018****Subject Code: 01101152****Time: 10 am to 1 pm****Subject Name: Building Materials and Construction Technology-II****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 Draw footing elevation, isometric and alternate footing courses of brick pier. **(10)**

Q.2 Attempt **Any 5** out of 6: **(20)**

A. Define the following :

- i) Effective span
- ii) Verge
- iii) Hip
- iv) Rafter

B. Answer the following:

- i) Explain types of lengthening and widening joints
- ii) Explain timber first floor in detail with sketches.

C. Explain various applications of the following in building construction:

- i) Glass ii) Metal

D. Sketch the following:

- i) Buddle Joints ii) Batten iii) Collar beam roof iv) Double or Purlin Roof

E. Explain briefly with sketches:

- i) Types of pitched Roofs ii) Any 2 true Arches

F. Answer the following:

- i) Enlist types of timber floors with sketches.

Q.3 Answer briefly with sketches (**Any 5**) : **(10)**

- a) Tusk tenon Joints
- b) Lean to roof
- c) Close Couple Roof
- d) Dove tail Joints
- e) Bridle Joint
- f) Cogged Joint

Q.4 Explain the following (**Any 2**) **(10)**

- a) What do you understand by a squint junction? Draw typical sketches showing squint junction of 1 bk external wall and 1bk internal wall in (A) English bond
- b) Explain in detail types of foundation with sketches.
- c) Explain king post truss in detail with sectional elevation.