

Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE

B.Arch, B.Arch (I.D) Regular Examination, Summer 2015-16

Semester: II

Date: 16/05/2016

Subject Code: 01101152

Time: 10.00 AM to 01.00 PM

Subject Name: Building Materials & Construction Technology-II

Total Marks: 50

Instructions:

1. Each section carries 25 marks.
2. Q.1 and Q.2 (a) are compulsory questions of each section.
3. Q.2 (b) has sub optional questions.
4. Only one question has to be attempted between Q.3 and Q.4 in each section.
5. Figures to the right indicate full marks.
6. Write separate sections on separate answer sheets.

SECTION-A

- Q:1** What are Timber Floors? Sketch / Draw the Plan, Section & Details of the following timber floor: (any one) **(10)**
- a. Ground Floor
 - b. First Floor
- Q:2 (a)** Define Brick Arches. Enlist and Draw any four types of brick arches. **(5)**
- Q:2 (b)** Draw a plan of both course of T junction, having Flemish Bond as external wall of two brick thick and English bond as internal wall of one and half thick. **(5)**

OR

- Q:2 (b)** Explain in brief the properties of Timber. **(5)**
- Q:3** Fill in the blanks: **(5)**
1. _____ are the joints used to increase the length of member.
 2. _____ are two dimensionally curved beam constructions for supporting load between two points of support over an opening.
 3. _____ is a type of flat panel that consist of two thin aluminium sheets bonded to a non – aluminium core.
 4. _____ is a material that is typical hard, opaque, shiny, and has good electrical and thermal conductivity.
 5. _____ is a liquid substance used for providing a protective or decorative surface coating, consisting of a pigment and a binder which sets or is treated to form a resistant film.

OR

- Q:4** Enlist & Explain the various types of metals as building material. Explain steel as building material. **(5)**

SECTION-B

- Q:1** What are L & T junctions in wall masonry? Draw a plan of odd and even courses of right angled corner junction (L junction) of English Bond having one and half brick thick wall. **(10)**
- Q:2 (a)** Define Brick Foundation. Enlist and Explain the types of Brick Foundations. Sketch the supporting sketches. **(5)**
- Q:2 (b)** Enlist the various types of bearing joints. Draw at least two of each type. **(5)**

OR

Q:2 (b) Define the Trusses of Timber. Enlist and explain the types of timber trusses. Draw / Sketch any one of them. **(5)**

Q:3 Explain the manufacturing process of tiles. **(5)**

OR

Q:4 Describe the process of Seasoning of Timber. **(5)**