

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

Semester: 2

Date: 13/05/2019

Subject Code: 01101152

Time: 10:00 am to 1:00 pm

Subject Name: Building Materials & Construction Technology -II

Total Marks: 50

Instructions:

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

Q:1 What are Brick Arches? Enlist and Draw all types of brick arches. **(10)**

Q:2 Answer any 05 out of 06 the following **(20)**

(a) Define the following : (Any 5)

1. Timber Boards
2. Tiles
3. ACP panels
4. L Junction
5. Brick Masonry
6. Arches

(b) Draw a plan of both courses T junction of English Bond having one and half brick thick wall. Mention the necessary terms.

(c) Explain in brief the properties of Timber.

Fill in the blanks:

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.

(d) What is Glass? Explain the uses of Glass as a construction material.

(e) Describe the process of Seasoning of Timber.

(f) Define Timber Truss. Explain & sketch the following (anyone):

A. King Truss. B. Queen Truss.

Q:3 Answer the following: **(10)**

(a) Define Brick Foundation. Enlist and Explain the types of Brick Foundations. Sketch the supporting sketches.

(b) Explain the Lengthening joints & Widening joints. Sketch any two lengthening and widening joints.

Q:4 Answer the following: **(10)**

- (a) What is Paint? Give uses of Paint. Enlist the various types of paints according to its usability.
- (b) Explain in brief: (any Five)
1. T Junction
 2. Varnish
 3. Glass
 4. Tiles
 5. Mortise joints
 6. Lengthening joints