

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE
B.Arch, Summer 2016-17 Examination

Semester: 2

Subject Code: 01101152

Subject Name: Building Materials & Construction Technology -II

Date: 22/05/2017

Time: 10:00 am to 1:00 pm

Total Marks: 50

Instructions:

1. Each section carries 25marks.
2. Q1 and Q2.a are compulsory questions of each section.
3. Q2.b has sub optional questions.
4. Only one question has to be attempted between Q3 and Q4.
5. Figures to the right indicate full marks.
6. Write section-A, section-B on separate answer sheets.

SECTION: A

- Q:1** What are Brick Arches? Enlist and Draw types of brick arches. (10)
- Q:2 (a) Define the following : (Any 5)** (05)
- | | |
|------------------|-------------------|
| 1. Timber Boards | 4. L & T Junction |
| 2. Tiles | 5. Brick Masonry |
| 3. ACP panels | 6. Arches |
- Q:2 (b)** Draw a plan of both courses L junction of English Bond having one and half brick thick wall. Mention the necessary terms. (05)

OR

- Q:2 (b)** Explain in brief the properties of Timber. (05)
- Q:3 Fill in the blanks:** (05)
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.
- Q:4** What is Glass? Explain the uses of Glass as a construction material. (05)

SECTION: B

- Q:1** Define Brick Foundation. Enlist and Explain the types of Brick Foundations. Sketch the supporting sketches. (10)
- Q:2 (a)** Explain the Lengthening joints & Widening joints. Sketch any two lengthening and widening joints. (05)
- Q:2 (b)** Describe the process of Seasoning of Timber. (05)
- OR**
- (b)** What is Paint? Give uses of Paint. Enlist the various types of paints according to its usability. (05)
- Q:3 Explain in brief: (Any Five)** (05)
- | | |
|------------|-----------------------|
| 1. Paints | 4. Floor Tiles |
| 2. Varnish | 5. Mortise joints |
| 3. Glass | 6. Lengthening joints |
- Q:4 Define Timber Truss. Explain & sketch the following (any one) :** (05)
- | | |
|----------------|-----------------|
| A. King Truss. | B. Queen Truss. |
|----------------|-----------------|