

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE & PLANNING
B.Arch. /B.ID Winter 2019-20 Examination

Semester: 2**Date: 18-11-2019****Subject Code: 01101152****Time: 10:00 am to 01:00 pm****Subject Name: Building Material and construction -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** Define Footing and Draw / Draft Footing comprising of Section, Isometric View and Alternate Footing course of Brick Pier. Scale of 1:20 **(10)**
- Q:2** Answer the following: (any 05) **(20)**
- (a) Define the following:
- | | |
|------------------|------------------|
| 1. ACP panels | 3. Rafter |
| 2. Brick Masonry | 4. Timber Boards |
- (b) Sketch the Following:
- | | |
|---------------------|--------------------------|
| 1. Batten | 3. Buddle Joints |
| 2. Collar Beam Roof | 4. Double or Purlin Roof |
- (c) Fill in the blanks:
1. _____ is a material that is typical hard, opaque, shiny, and has good electrical and thermal conductivity.
 2. _____ 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.
 3. _____ are the joints used to increase the length of member.
 4. _____ are two dimensionally curved beam constructions for supporting load between two points of support over an opening.
- (d) Define Timber Truss. Explain & sketch the following (anyone):
A. King Truss. B. Queen Truss.
- (e) Explain in brief the properties of Timber.
- (f) What are Brick Arches? Enlist and Explain any 05 types of Brick Arches.
- Q:3** Explain the following: (any 05) **(10)**
- | | |
|---------------|-------------------|
| 1. T Junction | 4. Pitched Roof |
| 2. Varnish | 5. Mortise joints |
| 3. Glass | 6. Paints |
- Q:4** Answer the following: **(10)**
- (a) Differentiate between the Lengthening joints & Widening joints. Sketch any two lengthening and widening joints.
- (b) Define Brick Foundation. Enlist and Explain the types of Brick Foundations. Sketch the supporting sketches.
- (C) What do you understand by a Squint Junction? Draw