Seat No.:	Enrolment No
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Q.1

Q.2

Q.2

0.3

Q.3

Q.4

Q.4

4. Footings.

GUJARAT TECHNOLOGICAL UNIVERSITY B.ARCH. SEMESTER II• EXAMINATION – SUMMER 2014

Subject Code: 1025003 Date: 14/05/2015 **Subject Name: Building Construction II** Time: 10.30 a.m. to 1.30 p.m. **Total Marks: 40 Instructions:** 1. Attempt all questions. 2. Question no. 1 is compulsory. 3. Assume suitable data wherever necessary and indicate in drawing/sketch. 4. Figures to the right indicate full marks. 5. Retain all construction lines. 6. Neatness of drawing and lettering is important. (a) Above an opening of 1200 width x 2100 height, in 350 thick brick wall, draw the details of Flat Arch. Draw front elevation, plan showing soffit and a cross section of the arch passing through key brick. (b) Give the names of minimum eight types of different glasses. 04 (a) In a room having inside clear dimensions of 2400mm width x 4500mm length x 3000mm height 06 (including slab thickness), draw plan and longitudinal section of a Dog leg Stair, to reach from ground floor to the top of first floor slab. Note: Minimum width of stair shall not be less than 1000mm. Use scale 1:20. (b) Give the names of minimum four different types of flooring tiles with available sizes of each type of OR (a) Draw a section of foundation for 350mm thick brick wall, showing foundation concrete, footing 06 courses and brick work up to plinth level in scale 1:10. (b) With the help of neat freehand sketches explain minimum eight types of plumbing fittings used in water supply line. Draw isometric views of any three types of joints between head and post in scale 1:5 also mention (a) names and sizes of members. (b) Explain minimum four different types of timber boards along with available sizes and thicknesses of each type of the board. OR (a) For a door opening of 750mm width x 2100 height, in 230 thick brick wall, draw the details of a suitable 06 door. Draw plan, elevation and section of the door in scale 1:10. Give the names of minimum four different types of paints and four names of manufacturers of paints. 04 **(b)** For a window opening of 1800mm width x 1200 mm height, at +900mm sill level, in 230 mm thick 06 brick wall, draw plan and elevation of a suitable wooden window with glass paneled shutters. (b) Explain through sketches(using geometric instruments) the geometry of any two of the following arches: 1. Venetian arch, 2. Florentine Arch, 3. Pointed Arch, and 4. Five Centered Arch (Show centers and radii of the arches.) OR Draw elevation of Segmental Arch and explain the following Terms: 06 1. Crown, 2. Haunch. 3. Voussoirs 4. Skew back, 5. Intrados and 6. Springing Line.

(b) Explain through neat freehand sketches the following: 1.Baluster, 2 Bracing, 3.Spandrill and