Seat No.: Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY B.ARCH - SEMESTER - III • EXAMINATION - WINTER • 2014

Subject Code: 1015003 Date: 23-12-2014 **Subject Name: Building Construction-1** Time: 10:30 am to 01:30 pm **Total Marks: 50 Instructions:** 1. Attempt all questions. 2. Make suitable sketches wherever necessary. 3. Figures to the right indicate full marks. (a) Draw 230 mm thick wall section of a single storied building and denote **Q.1** 04 all necessary parts from top to bottom. **(b)** Draw isometric view of stretcher bond and rat trap bond 04 (a) Draw / draft to scale - 1:10 04 **Q.2** An elevation and section of 350 mm thick flint rubble masonry Size of the wall panel in elevation. Height - 1500 and Width - 1000 mm **(b)** Explain detached piers and attached piers in English bond with relevant 04 Sketches. 0.3 Attempt any two of the following 08 Write comparison between clam burning and kiln burning. (b) Write advantages and disadvantages of mud construction. Draw isometric view of 3/4<sup>th</sup> bat and double king closer brick. (c) **Q.4** Attempt any two of the following 08 Explain various types of bamboo wall with sketches. (a) (b) Define (1) Header (2) Lap (3) Queen closer (4) Perpends (5) Sap wood (c) Explain all defects of timber **Q.5** (a) Explain three lengthening and three widening joints in wood 04 And explain four types of joints in stone masonry. (b) Define brick bond and enlist various types of brick bonds and sketch 04 One of the bond.

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