

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-III • EXAMINATION – WINTER • 2014

Subject Code: 2130607

Date: 18-12-2014

Subject Name: Building Construction

Time: 02.30 pm - 05.00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Make suitable neat and labeled sketches wherever required.

- Q.1** (a) Discuss the methods of boring for subsurface investigation. **07**
(b) Discuss about failures of foundation and suggest remedial measures to avoid it. **07**
- Q.2** (a) What is composite masonry? Explain stone facing with brick backing with neat and labeled sketch. **07**
(b) What are the purposes to provide cavity wall? Explain position of cavity at foundation with sketch. **07**
- OR**
- (b) Sketch for: 1. Flemish bond for 30 cm thick brick masonry wall. **04**
2. Ashlar chamfered fine tooled wall in elevation. **03**
- Q.3** (a) I. Sketch different types of steps with label. **04**
II. Sketch dog legged staircase in plan. **03**
(b) Explain construction and suitability of sliding door with sketch. **07**
- OR**
- Q.3** (a) Explain about circular staircase with sketch. **07**
(b) Explain casement window with sketch and label all the components on it. **07**
- Q.4** (a) What are the essential requirements of a floor? Explain marble flooring with sketch. **07**
(b) What is the need of temporary works? Enlist types of scaffoldings and explain any one in detail with sketch. **07**
- OR**
- Q.4** (a) What is included in wall finishes work for a building? Explain method of painting with types of materials used for a building. **07**
(b) Explain various types of roof coverings for pitched roof of a building. **07**
- Q.5** (a) I. Write in brief about Acoustical construction **04**
II. Sketch three types of joints in stone masonry. **03**
(b) Write in brief about 4 types of lintel and 3 types of arch with sketch. **07**
- OR**
- Q.5** (a) Write in brief about: 1. Anti termite treatment for a building. **04**
2. Cast-in-situ construction. **03**
(b) Explain about principle and construction of Green building. **07**
