

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV • EXAMINATION – SUMMER 2015

Subject Code: 140602**Date: 28/05/2015****Subject Name: Building Construction****Time: 10.30am-01.00pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) (i) Write different types of building. **03**
(ii) Write purpose and different methods of site exploration **04**
(b) Differentiate between shallow foundation and deep foundation along with types of them. **07**
- Q.2** (a) List various types of lintels. Write about relieving arch and horse shoe arch with sketch. **07**
(b) What is composite masonry? Explain cavity wall with sketch with position of cavity at foundation level. **07**
- OR**
- (b) State different types of bonds in brick masonry. Explain 1.5 brick thick wall in Flemish bond with elevation and plan for even and odd layers. **07**
- Q.3** (a) Explain segregation, bleeding and grades of concrete. **07**
(b) Explain solid core and hollow core flush door with sketch. **07**
- OR**
- Q.3** (a) Write advantages and disadvantages of precast and cast-in-situ concrete. **07**
(b) Write suitability of collapsible and rolling steel door. Also, write about fixtures used for doors with sketch. **07**
- Q.4** (a) Write the factors for selection of shape, size, location and number of windows in a room. Explain fanlight with sketch. **07**
(b) Enlist the materials used for flooring. Explain marble flooring with sketch. **07**
- OR**
- Q.4** (a) Explain clear storey window with sketch. Also, write fastenings used for windows. **07**
(b) Enlist upper floors. Explain jack arch floor with sketch. **07**
- Q.5** (a) Write types of roof and roof covering. Explain king post truss with sketch and label the components. **07**
(b) List various types of plaster finishes. Also, write various special materials used in plastering and various defects in plastering. **07**
- OR**
- Q.5** (a) Write definition and types of shoring, scaffolding and underpinning. **07**
(b) (i) Write various materials used for damp proofing. **03**
(ii) Write types of thermal insulating materials. **04**
