Seat No.: _____ Enrolment No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BPLAN – SEMESTER I– • EXAMINATION – WINTER 2016

Subject Code: 1015503 **Date: 02/01/2017**

Subject Name: Materials and principles of construction

Time:10:30 AM to 12:30 PM **Total Marks: 50**

Instructions:

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

Q.1 **(a)** Answer any six from following **06**

- Give any two names of iron ore available in India
- What is lap in brick masonry bond ?
- What is Retaining wall ?
- What is Buttresses ?
- What is lintel ?
- Which are the main constituents of cement ?
- What is plinth ?

(b) Define any two from following. **04**

I. Foundation
II. Damp proof course
III. Roof

Q.2 **(a)** Which are main constituents of glass ? Briefly Describe manufacturing process of it. **05**

(b) Describe various applications of glass in building construction. **05**

OR

(b) What is Fiber glass ?explainit's uses ? **05**

Q.3 **(a)** Describe geological classification of rock. **05**

(b) Describe chemical classification of rock. **05**

OR

Q.3 **(a)** What is seasoning of timber and its objectives ? **05**

(b) Give various names and sizes of market forms of wood. **05**

Q.4 **(a)** Enlist various types of brick masonry bond and sketch any two elevations. **05**

(b) Enlist various types of brick and sketch isometric view of standard brick indicating its parts and give all dimensions. **05**

OR

Q.4 **(a)** Classify stone masonry. **05**

(b) Enlist various types of concrete and explain it's uses **05**

Q.5 **(a)** Differentiate load bearing structure and frame structure. **05**

	(b)	Differentiate hard wood and soft wood.	**05**

OR

Q.5	**(a)**	Elaborate following terms GT, IC, MH, NT, VP, RWP, SP, WC, DC, FT	**05**
	(b)	Write short note on following (any one) water supply layout system. culverts	**05**