

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – II • EXAMINATION – SUMMER • 2014

Subject code: 1721401

Date: 16-06-2014

Subject Name: Advanced Civil Engineering Materials

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.**

- Q.1** (a) Differentiate between Aerated Autoclaved blocks and Fly-ash bricks. **07**
(b) Discuss briefly the properties of materials. **07**
- Q.2** (a) Enumerate the characteristics of a good building stone. **07**
(b) Explain how the following tests for stones are carried out: - (a) Hardness test **07**
(b) Impact test
- OR**
- (b) Describe in brief methods used for quarrying stone for building work. **07**
- Q.3** (a) Describe properties and uses of: (a) Copper (b) Aluminum (c) Cast iron **07**
(b) Give the classifications and properties of different types of lime. **07**
- OR**
- Q.3** (a) Write short notes on: Ferro cement **07**
(b) What are the various ingredients of the plastics? Give their specific uses. **07**
- Q.4** (a) Write short notes on Geosynthetics. **07**
(b) Write short notes on: Sound insulating materials **07**
- OR**
- Q.4** (a) Explain briefly the special varieties of glass. **07**
(b) Write short notes on: Heat insulating materials **07**
- Q.5** (a) Enlist different types of admixtures. Explain any two in detail. **07**
(b) Write short note on Market form of Timber. **07**
- OR**
- Q.5** (a) What is a sealant? What are their applications in the construction industry? **07**
(b) Write short note on Prevention of Timber. **07**
