

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E –Ist SEMESTER–EXAMINATION – JULY- 2012

Subject code: 711402N

Date: 07/07/2012

Subject Name: Construction Techniques

Time: 2:30 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) Discuss emergence of new building technology-climbing scaffolding **07**
(b) What is grouting. Discuss grouting materials. Describe various grouting methods. **07**

- Q.2** (a) Discuss significance of Nanotechnology in construction engineering. **07**
(b) Enlist & explain reasons for using Robots in industry. **07**

OR

- (b) Enlist & explain software related to construction work. **07**

- Q.3** (a) Explain various controls during slip forming and tolerances. **07**
(b) What is meant by temporary structures? Discuss importance of temporary structures. **07**

OR

- Q.3** (a) Discuss about (1) Laser screed technology (2) Dowel retrofitting **07**
(b) Write short note on trenchless technology. **07**

- Q.4** (a) Enlist & explain methods of erection. **07**
(b) Explain Basic Principles of Modular Co-ordination. **07**

OR

- Q.4** (a) Write short note on mechanical compaction of concrete. **07**
(b) State & discuss essential changes required for Indian construction industries to ensure high economic performance. **07**

- Q.5** (a) Explain self compacted concrete (SCC). State basic key properties required for SCC mix. Explain any two tests. **07**
(b) Write short note on methods of tunneling in Hard Rock. **07**

OR

- Q.5** (a) Write short note on Fibers Reinforced Concrete. **07**
(b) State various safety precautions to be observed in handling of precast elements. **07**
