

GUJARAT TECHNOLOGICAL UNIVERSITY
ME- SEMESTER II- EXAMINATION – SUMMER 2015

Subject Code: 2722015**Date:03/06/ 2015**

**Subject Name: Advances in Concrete Technology and Sustainable
 Construction Practices**

Time: 2:30 PM – 5:00 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) What are the workability tests performed for self compacting concrete as per EFNARC guidelines? Explain any one of them. **07**
 (b) Elaborate on the use of rice husk ash and silica fume in concrete. **07**
- Q.2** (a) Write in short on Curing compounds and their effects on properties of concrete. **07**
 (b) Explain on High performance concrete and High strength concrete. **07**
- OR**
- (b) Explain the concept of sustainable development in concrete technology. **07**
- Q.3** (a) How the epoxy resin works for rehabilitation work? Explain with it uses. **07**
 (b) Explain Geopolymer concrete with it uses. **07**
- OR**
- Q.3** (a) Explain Reactor powder concrete with it uses. **07**
 (b) How super plasticizers work for fresh concrete? Explain it uses. **07**
- Q.4** (a) Explain Ferro cement concrete with it uses. **07**
 (b) What are the non destructive tests to be used for concrete? Explain any one of them. **07**
- OR**
- Q.4** (a) Explain Roller compacted concrete with it uses. **07**
 (b) Explain the causes of deterioration and preventive measures of it. **07**
- Q.5** (a) Explain high volume fly ash concrete with it uses. **07**
 (b) How GGBS is affected on the concrete? Explain it advantages and disadvantages. **07**
- OR**
- Q.5** (a) Explain the concept of Green concrete **07**
 (b) Elaborate on the health assessment of concrete. **07**
