

**GUJARAT TECHNOLOGICAL UNIVERSITY****ME – SEMESTER –II-(New)-EXAMINATION – SUMMER-2019****Subject Code: 3721415****Date: 30/05/2019****Subject Name: Quality & Safety Management in Construction****Time: 02:30 PM TO 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) Explain the importance of quality management in construction. Explain the different objectives of quality management. **07**  
 (b) Define the term accident. Explain the reasons for accidents on construction sites. **07**
- Q.2** (a) Explain the Taguchi's concept of quality. **07**  
 (b) Give difference between quality control and Quality inspection. **07**
- OR**
- (b) Write short note on: total quality management in construction. **07**
- Q.3** (a) Write short note on Quality System Standards **07**  
 (b) Write Application of Six Sigma tool to RCC work in building. **07**
- OR**
- Q.3** (a) Explain (1) Histogram (2) Fishbone diagram **07**  
 (b) How the economy and project duration can affect the quality management. **07**
- Q.4** (a) Discuss about OSHA. Write its benefit to construction industry. **07**  
 (b) Explain the responsibilities and authorities of contractors and consultants in quality assurances and quality control. **07**
- OR**
- Q.4** (a) Write effectiveness of safety programme in construction industry. **07**  
 (b) Explain the effect of direct cost and indirect cost in safety management. **07**
- Q.5** (a) Explain the safety in construction operations on various construction sites. **07**  
 (b) Write short note on health and environment management system. **07**
- OR**
- Q.5** (a) Enlist the types of accident occur on bridge site. Also write various Safety requirements for bridge site. **07**  
 (b) Write Duties and Responsibilities of Site Engineer and Supervisor in safety management. **07**