

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**

**ME – SEMESTER II (NEW) – • EXAMINATION – SUMMER 2016**

**Subject Code: 2723307**

**Date: 02/06/2016**

**Subject Name: Infrastructure Engineering and Management**

**Time: 10:30 am to 01:00 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 types of risk involved in the infrastructure engineering projects. **07**  
(b) Describe the maintenance strategies of port infrastructure project **07**
- Q.2** (a) Differentiate hard infrastructure project and soft infrastructure Project. **07**  
(b) What is economical analysis of infrastructure project? **07**
- OR**
- (b) Describe the need analysis survey for smart city project. **07**
- Q.3** (a) What is a standard deviation? Explain standard deviation, Mean, Confidence in respect of data analysis. **07**  
(b) Discuss Data analysis for infrastructure project. **07**
- OR**
- Q.3** (a) Explain rehabilitation strategies for any infrastructure project. **07**  
(b) Write a short note on Integrated Infrastructure management system. **07**
- Q.4** (a) Explain stages of Life cycle analysis. **07**  
(b) Define the term 1) Project Cost 2) Benefit cost ratio 3) Break even Analysis **07**
- OR**
- Q.4** (a) Discuss the life cycle analysis of Energy project. **07**  
(b) What is project revenue? How it can be determined ? **07**
- Q.5** (a) Write a short note on Private sector funding in infrastructure project **07**  
(b) What are the challenges of managing infrastructure project in India. **07**
- OR**
- Q.5** (a) Give the importance of estimating life of infrastructure project. **07**  
(b) Explain binomial probability distribution of the data analysis. **07**

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