

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. - SEMESTER – II • EXAMINATION – WINTER • 2013****Subject code: 1721207****Date: 04-01-2014****Subject Name: Infrastructure Engineering and management****Time: 10.30 am – 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) Describe different infrastructure sectors and give its importance. **07**
(b) Explain construction, financial and commercial risk involved in infrastructure projects. **07**

- Q.2** (a) What is public private partnership? Discuss on BOT, BOLT and DFBOT. **07**
(b) Why need assessment is required for any infrastructure projects? **07**
Describe the need assessment of transportation project.

OR

- (b) Explain the challenges and risk involved in nuclear power station project at kakrapar in Gujarat. **07**

- Q.3** (a) What is life cycle analysis? Explain various phases of life cycle analysis. **07**
(b) Role of infrastructure in development of country. **07**

OR

- Q.3** (a) Write a brief note on infrastructure management information system with its function and advantages. **07**
(b) Discuss the various parameters to be considered in data analysis. **07**

- Q.4** (a) Discuss on maintenance strategies of any civil engineering project. **07**
(b) Explain feasibility and technical studies required for infrastructure project. **07**

OR

- Q.4** (a) Explain (i) Median (ii) Frequency distribution. **07**
(b) Explain performance evaluation. **07**

- Q.5** (a) Discuss life cycle analysis of railway sleeper. **07**
(b) Define project cost and project revenue. How it can be determined? **07**

OR

- Q.5** (a) Give the importance of estimating life of infrastructure project. **07**
(b) Explain the data requirements of infrastructure management system **07**
