

GUJARAT TECHNOLOGICAL UNIVERSITY**ME – SEMESTER I (NEW) EXAMINATION – SUMMER 2017****Subject Code: 2714803****Date: 11/05/2017****Subject Name: Infrastructure & Transportation Planning****Time: 02:30 p.m. to 05:00 p.m.****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) Provide detailed classification of urban infrastructure types. **07**
 (b) Describe the significance and importance of urban infrastructure services. **07**
- Q.2** (a) Mention criteria for land area requirement for various social infrastructure. **07**
 (b) What are the criteria for selecting ideal location of a fire station? **07**
- OR**
- (b) What are the criteria for selecting ideal location of a Water Treatment Plant? **07**
 Support your answer with an example.
- Q.3** (a) Why population projection is essential? Classify the methods of population projection. Explain any one in detail. **07**
 (b) Prepare a detailed note on losses in water distribution network. **07**
- OR**
- Q.3** (a) Explain the process of sewage treatment plant. **07**
 (b) Explain the importance of storm water management in an urban area. **07**
- Q.4** (a) Enlist methods of solid waste treatment. **07**
 (b) Enlist various stages and explain the solid waste management system. **07**
- OR**
- Q.4** (a) Prepare a detailed note on energy & power distribution network in an urban area. **07**
 (b) Enlist various methods of firefighting. Explain any two in detail. **07**
- Q.5** (a) Prepare an explanatory note on types of transport systems. **07**
 (b) What are the transport problems and mobility issues in an urban area? **07**
- OR**
- Q.5** (a) What surveys and studies are performed for traffic and transportation planning? Prepare a list of surveys and explain any two in detail. **07**
 (b) Explain the concept of trip generation and trip distribution. **07**
