

GUJARAT TECHNOLOGICAL UNIVERSITY**B.PLAN- SEMESTER– V EXAMINATION – WINTER 2018****Subject Code:1055506****Date:07/12/2018****Subject Name:Sustainable Urban Development****Time:10:30 AM TO 12:30 PM****Total Marks: 50****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a) What is sustainable development along with its definition? 05
- (b) Explain sources and impacts of water pollution. 05
- Q.2 (a) Explain concepts of Agenda 21 or Brundtland Commission? 05
- (b) Explain the term Eco-sensitive zone? 05
- OR
- (b) Explain in brief ECO-CITY approach ? 05
- Q.3 (a) What are the various sources , types and effects of air pollution? 05
- (b) Explain what are the challenges in integrating landuse planning and transportation planning? 05
- OR
- (b) Give examples of ‘open spaces’ in urban areas. List down any four benefits of providing such open spaces in cities. 05
- Q.4 (a) Explain the phenomenon of ‘Global Warming’ with proper sketch and list down its impacts. 05
- (b) What are the different types of conservation zones which should be considered in land use planning at regional level? 05
- OR
- (b) Explain the Urban Heat Island effect and its causes and impacts ? 05
- Q.5 (a) What are renewable sources of energy and give its examples ? 05
- (b) Explain about the non-renewable sources of energy with its examples ? 05
- OR
- (b) What are the direct and indirect benefits of ecosystems? 05
