

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-IV EXAMINATION – WINTER 2025****Subject Code:3141308****Date:13-11-2025****Subject Name:Environmental Resource management****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.
4. Simple and non-programmable scientific calculators are allowed.

- Q.1** (a) Differentiate between renewable and nonrenewable resources. **03**
 (b) Enlist various conventional sources of energy and explain any one in detail. **04**
 (c) Describe about Water recycle and reuse concept with its advantage in context of sustainability. **07**
- Q.2** (a) Define sustainability and explain briefly **03**
 (b) Enlist and explain various reasons of degradation of environmental resources. **04**
 (c) How would you manage the balance in resource utilization and Exhaustion? Support your answer with suitable example. **07**
- OR**
- (c) What is population explosion? Do you think it will be endangered for sustainability? Elaborate your answer. **07**
- Q.3** (a) What is the concept of Doubling time? **03**
 (b) Explain about Malthusian theory. **04**
 (c) Describe about Clean Development Mechanism and its advantages in details **07**
- OR**
- Q.3** (a) Give brief scenario of global water distribution. **03**
 (b) Explain various measures of food availability. **04**
 (c) Provide your views on biodiversity, its impact and about its protection. **07**
- Q.4** (a) Enlist various population forecasting method and explain any one in brief. **03**
 (b) How will you develop Sustainable Goals in context of environmental resources.? **04**
 (c) Explain about Social forestry and its types. **07**
- OR**
- Q.4** (a) Enlist various fossil fuel types of energy and explain briefly about their environmental consequences **03**
 (b) Enlist various environmental and social consequences due to population dynamics. **04**
 (c) Describe about impact of industrialization and urbanization on water resources with suitable example. **07**
- Q.5** (a) What is population dynamics? Write its basic equation. **03**
 (b) Enlist various resource management tools and explain any one in detail. **04**
 (c) Describe about Carbon Foot print analysis and any method to carry out such analysis **07**
- OR**
- Q.5** (a) Define forest life and wildlife. **03**
 (b) State about GNP and Quality of Life. **04**
 (c) Enlist and explain various alternative sources of energy. **07**
