

**Shantilal Shah Engineering College, Bhavnagar**  
**Civil Engineering Department**  
**PAT: OCT- 2019**  
**Syllabus**

**BE Sem 1- Branch (CIVIL,ME,EE,EC,IT,IC)**

**ENVIRONMENTAL SCIENCE (3110007)**

### **1 INTRODUCTION TO ENVIRONMENT**

Definition, principles and scope of Environmental Science. Impacts of technology on Environment, Environmental Degradation, Importance for different engineering disciplines.

### **2 ENVIRONMENTAL POLLUTION**

- a) **Water Pollution:** Introduction – Water Quality Standards, Sources of Water Pollution, Classification of water pollutants, Effects of water pollutants.
- b) **Air Pollution:** Composition of air, Structure of atmosphere, Ambient Air Quality Standards, Classification of air pollutants, Sources of common air pollutants like PM, SO<sub>2</sub>, NO<sub>x</sub>, Auto exhaust, Effects of common air pollutants.
- c) **Noise Pollution:** Introduction, Sound and Noise, Noise measurements, Causes and Effects
- d) **Solid Waste:** Generation and management.

### **3 GLOBAL ENVIRONMENTAL ISSUES**

Climate Change, Global Warming and Green House Effect, Acid Rain, Depletion of Ozone layer.