

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER– III (New) EXAMINATION – WINTER 2019****Subject Code: 3133508****Date: 3/12/2019****Subject Name: Environmental Management - I (EM-I)****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.

	<b>Marks</b>
<b>Q.1</b> (a) Define Ecology, Autecology and Synecology	<b>03</b>
(b) Describe Pyramid of Numbers.	<b>04</b>
(c) Explain Principle of Sustainable Development.	<b>07</b>
<b>Q.2</b> (a) Define Biotechnology, sustainable development, Bioremediation.	<b>03</b>
(b) Explain Grassland Ecosystem	<b>04</b>
(c) What is the Food Supply and Demand Scenario for India?	<b>07</b>
<b>OR</b>	
(c) Explain factors affecting Bioremediation.	<b>07</b>
<b>Q.3</b> (a) Give the difference between Biotic and Abiotic Component.	<b>03</b>
(b) Explain Desert Ecosystem.	<b>04</b>
(c) Explain Environmental Effects of Deforestation.	<b>07</b>
<b>OR</b>	
<b>Q.3</b> (a) Describe Pyramid of Energy.	<b>03</b>
(b) Describe land pollution due to soil pollution.	<b>04</b>
(c) Explain Carbon Cycle.	<b>07</b>
<b>Q.4</b> (a) What is the difference between an ecosystem and an Biome?	<b>03</b>
(b) Explain Autotrophs	<b>04</b>
(c) Explain Major Ecological and Economic Services provided by Forests.	<b>07</b>
<b>OR</b>	
<b>Q.4</b> (a) Explain Principle of Bioremediation.	<b>03</b>
(b) How does Deforestation occur?	<b>04</b>
(c) Explain in detail Food Web.	<b>07</b>
<b>Q.5</b> (a) Explain Application of Biotechnology in Medical Field.	<b>03</b>
(b) Describe Environmental Impacts of Agriculture.	<b>04</b>
(c) What are the causes of land degradation?	<b>07</b>
<b>OR</b>	
<b>Q.5</b> (a) Describe Detritus Food Chain.	<b>03</b>
(b) Explain function of forest.	<b>04</b>
(c) Which are the factors affecting Bioremediation?	<b>07</b>

\*\*\*\*\*