

GUJARAT TECHNOLOGICAL UNIVERSITY
BPLAN – SEMESTER IV • EXAMINATION – WINTER 2017

Subject Code: 1045504**Date: 17/11/17****Subject Name: Ecology and Environmental Management****Time: 2.30 PM to 4.30 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)** (1) _____ is the study of the interconnections and inter-dependence of plants, animals and their environment **06**
- (a) Ecosystems (b) Ecology
(c) Physics (d) Chemistry
- (2) Ecosystems can be very tiny or very large. This statement is _____.
(a) False (b) Not sure
(c) True (d) Don't know
- (3) _____ refers to the transitional region between two or more ecosystems.
(a) Biota (b) Biome
(c) Ecotone (d) Ocean
- (4) _____ Pollutants are broken down or reduced to acceptable levels by physical, chemical or biological processes
(a) Bio-degradable (b) Non-biodegradable
(c) All (d) Plastic
- (5) Plants, animals are _____ components of an ecosystem.
(a) Biotic (b) Non-biotic
(c) Regular (d) small
- (6) Full form of EIA is _____
(a) Environmental Impact Assessment (b) Economic Impact Assessment
(c) Economic Indian Assessment (d) Environment Ideal Assessment
- (b)** Define following terms: (Any Four) **04**
- (1) Heterotrophs
(2) Abiotic components
(3) Autotrophs
(4) Environment
(5) Renewable Energy
- Q.2 (a)** What is an Ecosystem? Explain different components of ecosystems. **05**
- (b)** Explain what do you understand by the term 'Food chain' in an ecosystem? Give examples of any one food chain. **05**

OR

(b) What are the characteristics of an ecosystem? **05**

Q.3 (a) What are the impacts of urbanization on ecosystems? **05**

(b) Explain 'Water cycle' with proper sketch. **05**

OR

Q.3 (a) What are the different benefits of ecosystems? **05**

(b) What are ecological pyramids? List three types of pyramids. Draw sketch to explain any one type of pyramid. **05**

Q.4 (a) Explain the 'Oxygen cycle'. **05**

(b) What are the causes of destruction of different nutrient cycles in ecosystems? **05**

OR

(b) What are the advantages of using renewable energies? **05**

Q.5 (a) Define following terms with at least one example of each type. **05**

(1) Commercial energy

(2) Renewable Energy

(3) Non-renewable energy

(b) What is an Environmental Impact Assessment? Why is it important? **05**

OR

(b) Explain key steps in doing EIA studies for any development project. **05**
