

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
B.Sc., Summer 2017-18 Examination

Semester: 5**Subject Code: 11102303****Subject Name: Environmental Biotechnology****Date: 31/05/2018****Time: 02:00PM TO 04:30PM****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1. A) Write brief note on :** (08)
- (a) Types of ecosystem
 - (b) Food chain and food web
- Q.1. B) Answer the following questions (Any two)**
- (a) Schematically draw (04)
 1. Carbon cycle
 2. Phosphorous cycle
 - (b) Explain the concept of sustainable development (04)
 - (c) Briefly discuss the role of biotechnology in environmental protection (04)
- Q.2. A) Write brief note on:**
1. Biological magnification (04)
 2. Green house effect (04)
- Q.2. B) Briefly describe the following (Any two):**
1. Biosensors for detection of pollution (03)
 2. Harmful effect of Ultra Violet radiations (03)
 3. Significance of Ames test (03)
- Q.3. A) Write brief note on:** (08)
- (a) Bioscrubbers
 - (b) Biofilters
- Q.3. B) Briefly describe following (Any two)**
- (a) Biotrickling filters (04)
 - (b) Rotating bioreactors (04)
 - (c) Solid waste processing (04)
- Q.4. A) Write brief note on:**
- (a) Biodegradation of Xenobiotics (04)
 - (b) Biosorption (04)
- Q.4. B) Answer the following (Any two)**
- (a) Use of genetically engineered microorganisms in treatment of wastes (03)
 - (b) Genetically engineered microorganisms and biosafety (03)
 - (c) desulphurization of coal. (03)