

**P. S. SCIENCE & H. D. PATEL ARTS COLLEGE, KADI**

**Internal Examination**

**B. Sc. SEM - VI**

[Mark : 40

15-3-2017]

**Environmental Biotechnology**

[1-30 to 3-30

**CC - 603**

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1. **Attempt all questions. Each question carries 1 mark. 10**
- (1) Expand MEOR and PLA.
  - (2) Write any two applications of Bioplastics.
  - (3) What is Diazotrophs ?
  - (4) What is Ultimate Biodegradability ?
  - (5) Expand DDT and PCP.
  - (6) Give examples of anthropogenic compounds ?
  - (7) Aromatic Hydrocarbons are oxidized by \_\_\_\_\_ in to catechol.  
A) Monooxygenase                      B) Dioxygenase  
C) Dihydrogenase                      D) None of these
  - (8) Reductive dechlorination of TCE is carried out by \_\_\_ bacteria.  
A) Methanotrophic                      B) Methanogenic  
C) Pseudomonas spp.                      D) None of these
  - (9) Why Haloalkyl compounds are not degraded by Aerobic microorganisms ?
  - (10) Uses of Pesticides & Fertilizers are \_\_\_\_\_ sources of Pollution.  
(A) Fossil fuel (B) Non Fossil Fuel (C) Point (D) None of these
2. **Answer any 4 questions. Each question carries 5 marks. 20**
- (1) Write down Chemical properties of Waste water.
  - (2) Describe Role of Microbes in Biofertilizer.
  - (3) Enlist the mechanisms of Transport & Fate of Contaminants in environment and explain any two in brief.
  - (4) Write down the point & nonpoint sources of water pollution.
  - (5) Describe Biomagnification of Contaminants with respect to DDT.
  - (6) Describe Biodegradation of Recalcitrant Nitroaromatic Compound with specific example.
3. **Answer any one question. Each question carries 10 marks. 10**
- (1) Explain Biosynthetic pathway of PHB and PHA Production.
  - (2) Describe biodegradation of Aliphatic and Alicyclic Petroleum hydrocarbons with pathways.
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