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

Internal Examination

B. Sc. SEM - VI **[Mark : 40**

22-3-2016] **Environmental Biotechnology** **[1-30 to 3-00**

CC - 603

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1. Attempt all the questions. Each question carries 1 mark. 10

(1) Which of the bacteria is considered for biological leaching?

A) *T. thiooxidans* B) *T. ferrooxidans*

C) *Ferrobacillusjerrooxidans* D) All of these

(2) Environment Biotechnology involve _____

A) Use of microbes to clean up environment

B) Bioremediation

C) The study of benefit and hazard associated with genetically modified microorganism

D) All of these

(3) Nonbiological foreign chemicals are termed as_____

A) Antibiotic B) Probiotic

C) Xenobiotic D) All of these

(4) Expand DDT.

(5) Define Biofertilizer.

(6) _____ involved in Vermi culture biotechnology for solid waste management.

a) red earth worm b) weed

c) Both a & b d) None of these

(7) Addition of known active microbes to soil or water with the purpose of accelerating microbial process is called as _____

A) Bioaugmentation B) Biostimulation

C) Biodegradation D) All of these

(8) Which of following agent can be used for maintaining PH of compost?

a) Lime b) Gypsum

c) Rock Phosphate d) All of these

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(9) The first step in the biodegradation of many contaminants is _____

A) Denitrification B) Decarboxylation

C) Dehalogenation D) Transpeptidation

(10) If BOD of a river is found very high , it shows

a) Water is highly polluted b) Water is clean

c) Water has minerals d) All of these

2. Answer any 4 questions. Each question carries 5 marks. 20

(1) Write down a note on Bioplastic.

(2) Give the definitions (any five)

a) Ready biodegradability b) Anaerobic Digestion

c) Biostimulation d) Recalcitrant compound

e) Eutrophication f) Compost

(3) Draw the reductive dechlorination pathway of PCE.

(4) What is Biomagnifications process? Explain with example.

(5) List out various pollutants present in air and water environment.

(6) Write down a note on MEOR.

3. Answer any one question. Each question carries 10 marks. 10

(1) Give a brief idea on Waste Water Treatment Process. Explain in detail any one Waste Water Treatment Process.

(2) Define bioremediation. Write down name of microbes involved in bioremediation process. Describe in detail ex-situ bioremediation