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No. Of Printed Pages 2

**SARDAR PATEL UNIVERSITY**  
**T.Y.BSc. Examination, 2016**  
**SEMESTER VI**  
**ENVIRONMENTAL BIOLOGY**  
 Subject code -US06CBOT04

Date :04/04/2016

Day:Monday

Time: 2.30to 5.30p.m.

Total Marks: 70

Note : \* All questions are to be attempted. \*Figures to the right indicate marks.

Q. 1	<p>Choose the correct answer from the given options{10x1}</p> <p>1)The Biogas is produced by a consortium of anaerobic bacteria that induce.....</p> <p>a) Methanogens b) Sulfar c) Heptachlor d) DDT</p> <p>2)Multiple microbial communities grow on solid surface to produce multilayered complexes called-----</p> <p>a) Biofilms b) Bioscrubbers c) Biofilters d) Biotrickling filter</p> <p>3)-----is used to recover &amp; remove metals from contaminated sites.</p> <p>a) Bio leaching b) Metal oxidation c) Microbial binding d) Chelation</p> <p>4)Burning of fossil fuels emits:</p> <p>a) Carbon dioxide b) Carbon monoxide c) Nitrous oxide d) all the above.</p> <p>5) Most of the CO emitted to the air comes from:</p> <p>a)Vehicular exhaust b) SPM c) Metals d) Decomposed organic matter</p> <p>6)Mostimportant causative pollutant of soil may be:</p> <p>a)Iron junks b) Detergents c) Glass junks d) Plastics</p> <p>7) Full form of IPCC is.</p> <p>a)Intergovernmental panel on climate change b) Indian governmental panel on climate change c) International panel on climate change d) Indian panel code on communication.</p> <p>8)The conservation of rare and threatened species in its natural habitat is known as:</p> <p>a)ex-situ conservation b) in-situ conservation c) wild life conservation d) in vitro conservation</p> <p>9) Environmental protection Agency is independent federal Agency of the U.S. Government established in.....</p> <p>a)1970 b)1980 c) 1960 d) 1990.</p> <p>10)World Environment Day is celebrated on -----</p> <p>a) 5<sup>th</sup> June b) 26<sup>th</sup> Feb c) 23<sup>rd</sup> July d) 6<sup>th</sup> November</p>	10
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Q. 2	<p>Answer the following question (Any ten).</p> <ol style="list-style-type: none"> <li>1) Define: Biofilms.</li> <li>2) Difference between in-situ and ex-situ bioremediation?</li> <li>3) Write the full form of OECD, TCE</li> <li>4) Define: Pollution.</li> <li>5) What are the principal pollutants of air?</li> <li>6) What do you mean by non-biodegradable pollutants?</li> <li>7) What are the sources of air pollution?</li> <li>8) What is smog?</li> <li>9) What is Green House Effect?</li> <li>10) What do you mean by biological de-odorisation?</li> <li>11) Define: Biotechnology.</li> <li>12) Write the full form of UNEP and IUCN.</li> </ol>	20
Q. 3	<p>What is bioremediation? Write a short account of various approaches and technologies of bioremediation.</p> <p style="text-align: center;">OR</p>	10
Q. 3	<p>Write notes on:</p> <ol style="list-style-type: none"> <li>a) Need, scope and the environmental applications of bioremediation.</li> <li>b) The current status of bioremediation.</li> </ol>	05 05
Q. 4	<p>Write notes on:</p> <ol style="list-style-type: none"> <li>a) How can you evaluate the cost of pollution.</li> <li>b) Acid rains.</li> </ol> <p style="text-align: center;">OR</p>	05 05
Q. 4	<p>What are the major sources of water pollution in our country? Discuss the nature of pollutants responsible for water pollution and suggest suitable methods of its control.</p>	10
Q. 5	<p>Describe Biotechnology and its Application in environmental protection .</p> <p style="text-align: center;">OR</p>	10
Q. 5	<p>Discuss the causes and consequences of global warming and climate change.</p>	10
Q. 6	<p>Write short notes on:</p> <ol style="list-style-type: none"> <li>a) Environmental organizations.</li> <li>b) Environmental protection Act.</li> </ol> <p style="text-align: center;">OR</p>	05 05
Q. 6	<p>Discuss the goals, objectives and guiding principles of environmental education.</p>	10