## PARUL UNIVERSITY

## PARUL INSTITUTE OF APPLIED SCIENCES MID SEMESTER INTERNAL EXAMINATION, MARCH 2020

## B. Sc. Semester IV Subject: Environmental Science

Paper Code:11114254 Title of the paper: Techniques for Pollution Control

Date: 06 /03 /2020 Time: 12:00 to 1:30 pm

**Maximum Marks: 40** 

## **Instructions:**

- 1. All questions are compulsory and options are given in first and second question only.
- 2. Numbers to the right of question indicate the marks of respective question.

Q. 1	Attempt any one question of the following.	(08)				
	(i ). Discuss any one Solid Waste Disposal Techniques					
	(ii). Explain Trickling Filter in details					
Q. 2	Attempt any three questions of the following.	(12)				
	(i). Write down the advantages of Bio-fertilizers					
	(ii) Discuss In-Situ Bioremediation					
	(iii) Explain Oxidation Pond in brief					
	(iv) Discuss Phyto extraction					
	(v) Explain the methods for Vermin Composting					
Q. 3	Do as directed. Attempt all five questions.	(05)				
	(i). Define Bio Pesticide					
	(ii) What are the Environmental issues related to Landfill					
	(iii) What is Bio-Fertilizer?					
	(iv) Write down any one application of Bio-fertilizer to crop					
	(v) Define Phytoremediation.					
Q. 4	Write correct option in your answer sheet for following 15 multiple choice questions.	(15)				

MCQ 1	Which one is not the Nitrogen Fixing Bio Fertilizer					
	(A)	Rhizobium	(B)	Azo-spirillum		
	(C)	Azotobacter	(D)	Aspergillus		
MCQ 2	Bio Fertilizer Contain					
	(A)	Biological Materials	(B)	Biological and Chemical Materials		
	(C)	Chemical Materials	(D)	None of above		
MCQ 3	The temperature required for incineration plant is					
	(A)	>850 °C	(B)	<750 °C		
	(C)	<850 °C	(D)	>750 °C		
MCQ 4	Activated Carbon Injection applied for removal of					
	(A)	Heavy Metal	(B)	Organic Pollutant		
	(C)	Both (A) and (B)	(D)	Inorganic Pollutants		

MCO 5	Selective Non Catalytic Method is used to remove					
	(A)	Nitrogen Oxides	(B)	Carbon Dioxide		
	(C)	Sulphure Oxides	(D)	Ozone		
MCQ 6	Highly preferred Earthworm species for vermin composting is					
	(A)	Eudrilus eugeniae	(B)	Perionyx excavatus		
	(C)	Eisenia foetida	(D)	None of above		
MCQ 7	Moisture level should be maintained in Vermin Composting is					
	(A)	30-40 %	(B)	25-35 %		
	(C)	20-30 %	(D)	70-80 %		
MCQ 8	Whic	Dose/rate is suitable for Field Crops				
	(A)	3-4t/ha	(B)	3-5kg/plant		
	(C)	5-6t/ha	(D)	8-10kg/plant		
MCQ 9	9 For Crop, Bio-Pesticides is work as a					
	(A)	Food	(B)	Nutrients		
	(C)	Medicine	(D)	Water		
MCQ 10	How much % oxygen is enough to support aerobic biodegradation in gas phase					
	(A)	2 %	(B)	5 %		
	(C)	0.4 %	(D)	4 %		
MCQ 11	Full form of ORC is					
	(A)	Ozone Releasing Compound	(B)	Opaque Random Cost		
	(C)	Oxygen Releasing Compound	(D)	Oligo Releasing Compound		
MCQ 12	Whic	Thich one is not the phyto remediation process				
	(A)	Phytoextraction	(B)	In-Situ Bioremediation		
	(C)	Rhizofilteration	(D)	Phytostabilization		
MCQ 13	Rhizodegradation is also called as					
	(A)	rhizosphere biodegradation	(B)	phytostimulation		
	(C)	plant-assisted bioremediation	(D)	All of Above		
MCQ 14						
	(A)	Activated Sewage Process	(B)	Activated Septic Process		
	(C)	Activated Sludge Process	(D)	Acquired Sewage Programme		
MCQ 15	Which one is not the Water Pollution Control Techniques					
	(A)	Membrane Bioreactor	(B)	Thermal Oxidizer		
	(C)	Digester	(D)	Oxidation Pond		