]	Enrollmo	ent No: Exam Seat No:			
		C.U.SHAH UNIVERSITY			
	Summer Examination-2019				
,	•	Name: Environmental Engineering Code: 4TE05ENE1 Branch: B.Tech (Civil) :: 5 Date: 22/03/2019 Time: 10:30 To 01:30 Marks: 70			
]	 Instructions: (1) Use of Programmable calculator & any other electronic instrument is prohibited. (2) Instructions written on main answer book are strictly to be obeyed. (3) Draw neat diagrams and figures (if necessary) at right places. (4) Assume suitable data if needed. 				
Q-1	a)	Attempt the following questions: Define Hydrosphere.	(14)		
	b)	What is meant by non- point sources?			
	c)	Enumerate the water borne diseases.			
	d)	Give the objectives of water treatment process.			
	e)	Enumerate the major effects of the noise pollution.			
	f)	Fluoride pollution mainly affects which part of the body?			
	g)	Give any two examples for non-renewable energy sources.			
	h)	What is meant by leachate?			
	i)	Abbreviate the term 'BOD'.			
	j)	What do you understand by the word sustainable development?			
	k)	Define Mortality rate.			
	1)	What do you understand by the term 'Environmental degradation'?			
	m)	Give any two advantages of Renewable energy sources.			
Atten	n) npt any f	Write the use of pesticides in agricultural field. Four questions from Q-2 to Q-8			
Q-2	(a)	Attempt all questions Differentiate between Biotic and Abiotic components of environment.	(14) 06		



State the role of microbes in the environment.

(b)

08

Q-3		Attempt all questions	(14)
	(a)	Explain the methods used for the population forecasting with formulae.	07
	(b)	What are the factors affecting per capita demand? Explain it.	07
Q-4		Attempt all questions	(14)
	(a)	Draw a layout of water treatment plant with indicating its each process and also explain it.	08
	(b)	Write short notes on i) Coagulation and ii) flocculation	06
Q-5		Attempt all questions	(14)
	(a)	Explain the effect of air pollution on men, material and animals.	08
	(b)	Describe the methods of controlling noise pollution.	06
Q-6		Attempt all questions	(14)
	(a)	What do you understand by the word 'Integrated Pest Management (IPM)'?	07
	(b)	Explain DO sag curve with sketch.	07
Q-7		Attempt all questions	(14)
	(a)	Enlist the disposal of solid waste and explain sanitary land filling methods.	07
	(b)	What is solid waste management? Describe it with flow diagram indicating it's all functional elements?	07
Q-8		Attempt all questions	(14)
	(a)	Describe briefly various methods of collection of solid waste.	07
	(b)	Write short note on: Indian standards for drinking water.	07

