Se	at No	.: Enrolment No GUJARAT TECHNOLOGICAL UNIVERSITY	
Su	ıhied	M. E SEMESTER – III • EXAMINATION – WINTER 2012 et code: 734301 Date: 30-12-2012	
	U	et Name: Environmental Geotechnology	
	•	10.30 am – 01.00 pm Total Marks: 70	
In	stru	ctions:	
	1	1. Attempt any five questions.	
		2. Make suitable assumptions wherever necessary.	
		3. Figures to the right indicate full marks.	
	2	4. Draw neat sketches with details where necessary.	
Q.1	(a)	With a neat sketch, briefly explain contaminant movement from household to ground water.	10
	(b)	What are hazardous waste? Which characteristics are used for classifying waste as hazardous waste?	04
Q.2	(a) (b)	What is an importance of environmental geotechnology in civil engineering? Explain meaning of "waste". Enumerate different waste type.	07 07
Q.3	(a)	What is "NIMBY"? How it can be avoided?	07
Q.C	(b)	Explain the importance of "Environmental Geotechnology" from view point of human health and pollution.	07
Q.4	(a)	Discuss foundation problem that have to be faced for structures placed on soil contaminated by acidic pollutants.	07
	(b)	Differentiate diffusion from dispersion. With sketch describe dispersion in soil.	07
Q.5	(a)	Draw neat sketch of typical "Double lined" landfill.	07
V.	(a) (b)	Which are different stages involved in installation of monitoring well? Explain any one in detail	07
Q.6	(a)	Give mechanism of soil – water interaction.	07
~	(b)	How will you control landslides. Give remedial actions.	07

What is radioactive nuclear waste? Give its characteristics and classification in detail.

Q.7

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