Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER-II • EXAMINATION – SUMMER - 2017

Subject Code: 2721713 Subject Name: SOLID & HAZARDOUS WASTE MANAGEMENT Time: 02:30 PM To 05:00 PM Total Man		5/2017	
			0
Inst	2.	ons: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Critically discuss why effective solid and hazardous waste management is the	07
	(b)	need of time for country like India. State various hazardous wastes. What are the sources of nuclear waste? Why it requires extreme care to handle?	07
Q.2	(a)	Briefly introduce Solid Waste Management Rules, 2016. What is the most important point included in these rules?	07
	(b)	Discuss moisture content as one of the most important property of solid waste. OR	07
	(b)	What is a TCLP test? What is its importance? Explain in detail.	07
Q.3	(a)	Critically discuss the concept of source segregation with different storage bins in context of solid waste management. Explain with neat diagrams.	07
	(b)	How proper source segregation can help improve the efficiency of entire solid waste management system? Explain with neat diagrams. OR	07
Q.3	(a)	What are the transfer stations? What are their types? How can a properly designed and located transfer station help improve the efficiency of solid waste management system?	07
	(b)	Explain advantages of solidification and stabilization of hazardous wastes.	07
Q.4	(a)	What is landfill? Briefly explain the criteria for selection of primary landfill site.	07
	(b)	Explain – (A) - Rehabilitation of open dumps (B) - Sustainable Landfills OR	07
Q.4	(a) (b)	Explain advantages and disadvantages of incineration. Define these terms with reference to The Municipal Solid Wastes (Management and Handling) Rules, 2000 – composting, generator of wastes, leachate, municipal solid waste, recycling.	07 07
Q.5	(a) (b)	Short note – SHWM and sustainable development. What is CPHEEO ? Discuss its role in solid waste management in India.	07 07
Q.5	(a) (b)	OR Short note – Wealth from e waste. Explain the importance of reduce, reuse and recycle in effective solid waste management.	07 07
