Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - VIIth Semester–Examination – May/June- 2012 Subject code: 171304

Subject Name: Cleaner Production And Waste Utilization

Date:29/05/2012 Time: 02:30 – 05:00 pm **Total Marks: 70 Instructions:** 1. Attempt all questions.

- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

Q.1	(a)	What is cleaner production? How it is useful in Industry?	07
	(b)	Discuss six step methodology for CP.	07
Q.2	(a)	What is Good house keeping? Discuss in detail.	07
	(b)	Enlist and Explain checklist for good housekeeping.	07
OR			
	(b)	Discuss CP option with respect to chemical industry.	07
Q.3	(a)	Write short note on Energy Audit.	07
C	(b)	Discuss the concept of 3 R's.	07
		OR	
Q.3	(a)	Write a short note on reuse of solid industrial waste.	07
	(b)	Write a short note on reuse of liquid industrial effluent.	07
Q.4	(a)	Write short note on bio management for waste utilization.	07
X	(u) (b)	Write a short note on recycling of liquid industrial effluent.	07
	(0)	OR	07
Q.4	(a)	Write a short note on recycling of solid industrial waste.	07
	(b)	Write short note on generation of waste heat in industry.	07
05		Discuss types of heat measuremy againments	07
Q.5	(a)	Discuss types of heat recovery equipments.	
	(b)	Discuss heat recovery boiler in detail.	07
OR			
Q.5	(a)	Discuss financial analysis in cleaner production.	07
	(b)	How heat recovery is useful in cleaner production.	07
