

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. IST Semester–Remedial Examination – July- 2011****Subject code: 711605****Subject Name: Cleaner Production in Chemical Industries****Date:13/07/2011****Time: 10:30 am – 01:00 pm****Total Marks: 60****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1	(a) Explain the concept of cleaner production (CP).	06
	(b) Discuss the merits and demerits of CP.	06
Q.2	(a) Give brief account of CP tools.	06
	(b) Discuss CP techniques.	06
OR		
	(b) Describe methodology for CP.	06
Q.3	(a) Write a brief note on good housekeeping.	06
	(b) Discuss application of thermodynamics in CP.	06
OR		
Q.3	(a) Discuss application of reaction engineering in CP.	06
	(b) Role of bio-technology in CP.	06
Q.4	(a) Give a brief account of R-R-R theory/concept.	06
	(b) Discuss energy audit and energy conservation in CP.	06
OR		
Q.4	(a) Discuss CP and CT as remedy for climate change.	06
	(b) Write a brief note on Green Processes.	06
Q.5	(a) Write short note on use of unit operations in CP.	06
	(b) Write short note on clean fuels.	06
OR		
Q.5	Discuss one case study of CP.	12
