Seat No.:	Enrolment No
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## **GUJARAT TECHNOLOGICAL UNIVERSITY**

ME - SEMESTER- I (New course) • REMEDIAL EXAMINATION - SUMMER 2015

Subject Code: 2710201			Date:13/05/2015	
Ti	me: tructio	Attempt all questions.  Make suitable assumptions wherever necessary.	70	
Q.1	(a) (b)	Explain analysis process of algorithm with example. Explain asymptotic notations.	07 07	
Q.2	(a) (b)	Explain and compare 0-1 and fractional knapsack problem. Explain divide and conquer design strategy with quick sort.  OR	07 07	
	(b)	Explain Master theorem with example.	07	
Q.3	(a) (b)	Difference between Greedy and Dynamic programming. Explain making change problem using both techniques.  Explain GCD recursion theorem with Euclid algorithm.	07 07	
Q.3	(a) (b)	OR Define Approximation algorithms. Explain Travelling salesman problem. Explain the recursion tree method with example.	07 07	
Q.4	(a) (b)	Explain Bellman-Ford Algorithm in reference to Single Source Shortest Path. Explain potential method.	07 07	
Q.4	(a) (b)	OR Explain Floydøs Algorithm for shortest path along with example. What is amortized analysis? Explain Accounting method.	07 07	
Q.5	(a) (b)	Explain Boyer Moore Pattern matching algorithm.  Write a short note on P and NP problems.  OR	07 07	
Q.5	(a) (b)	Explain Strassenøs algorithm for matrix multiplication. Explain Naïve String matching algorithm.	07 07	
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