Assignment #2 – SPRING 2020

Course Title:	Design and Analysis of Algorithms		Course Code:	CSC301	Credit Hours:		3
Course Instructor:	Dr. Hasan Jamal		Programme Name:	BS Computer Science			
Semester:	5th	Batch: BCS	Section:	C, D	Date:	19/3/2020	
Deadline:	27/3/2020		**Maximum Marks:**		40		

Important Instructions / Guidelines:
- Handwritten strictly.
- Maximum three persons per group are allowed for submission.
- No late submission allowed

Question:

Solve the following recurrence equations using the "Recursion Tree Method".

1) $T(n) = 2T(n/2) + n^2$
2) $T(n) = 3T(n/2) + n^2$
3) $T(n) = 4T(n/2) + n$
4) $T(n) = 2T(n-1) + 1$
5) $T(n) = T(n/4) + T(3n/4) + n$