**ALGORITHMS WEEK 3**

**Questions**

**Q1** : T (n) = 9 T(n/3) +n Show the working time.

**Q2**: Find the running time of the Merge Sort algorithm with the help of the master theorem.

**Q3**: T(n) = 3T(n\4) +nlogn Show the working time.

**Q4.** Tn) = 2T(n\4) + n^2 Use the master teorem.

Q5. T(n) = 2T(n/2) +n^2 Use the recursion tree teorem.