**Assignment** 1

Assignment Submission deadline 10/09/2021 before 9.00Am

**Solve the following recurrence relations using Master’s Theorem.**

1. T(n) = 9T(n/3) + n
2. T(n) = T(2n/3) + 1
3. T(n) = 4T(n/2) + log n
4. T(n) = 2T(n/4) + c
5. T(n) = T(n/4) + log n
6. T(n) = 2T(n/4) + log n
7. T(n) = 3T(n/3) + n log n
8. T(n) = 16T(n/4) + n!
9. T(n) = 3T(n/2) + n
10. T(n) = 4T(n/2) + cn
11. T(n) = 3T(n/3) + n/2
12. T(n) = 4T(n/2) + n/ log n
13. T(n) = 7T(n/3) + n2
14. T(n) = 8T(n/3) + 2n
15. T(n) = 16T(n/4) + n