Homework Assignment for Week 03

1. Section 10.5: Odd numbered problems in problem 17-43, 48, 53, 54.

2. Section 10.6: Problems 9, 11, 25, 26, 28, 29, 30, 35, 39, 41, 43, 49, 53, 63.

3. Section 10.7: 7, 11, 15, 19, 23.

   Hint: To find the radius of convergence for $\sum a_n x^n$, one can apply ratio test or root test to $\sum |a_n x^n|$. (why?)

4. Section 10.7: Find the first few terms of the power series representation of

$$\frac{1 - x^2 + x^4 - \cdots}{1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \cdots}.$$