

Assignments #105

Differential Equation

Note: Due date of submission is 22/06/2021

Q1. Find interval and radius of convergence

of

$$(1) \sum_{k=1}^{\infty} \frac{(-1)^k}{10^k} (x-5)^k \quad (11) \sum_{k=0}^{\infty} k! (x-1)^k$$

Q2. Write down the following series in a single power series whose general term involves x^k .

$$\sum_{n=2}^{\infty} n(n-1) C_n x^{n-2} + \sum_{n=0}^{\infty} C_n x^{n+2}$$

Q3. Solve problems No (15), ⁽²²⁾~~and~~ ~~(18)~~ Ex 6.2

Q4. Solve problems No (4), (19) and (26)

