

2021(2); NA; CT#2; Time: 30 minutes; Marks: 10

ii) Solve the following system of linear equations by the Gauss-Seidel iterative method.

$$10x - 5y - 2z = 3$$

$$4x - 10y + 3z = -3$$

$$x + y + 8z = 20$$

i) Solve, by Euler's method of the equation  $\frac{dy}{dx} = x + y$ ,  $y(0) = 1$ , for  $0 \leq x \leq 1$  taking  $h = 0.1$ .