

**North South University**  
Mat-350, Sec- 7, 8 & 16, Fall-2021  
Quiz-4, Total Marks-15, Time-20 mins

Name: \_\_\_\_\_ Id# \_\_\_\_\_ Date# 04/01/2022

**Q1. Define Fourier Series. Find the Fourier sine series of the function obtained by passing the voltage**

$$v(t) = V_0 \sin(kk\pi t)$$

**through a half-wave rectifier that clips the negative half-waves.**

**(Where  $k \neq 0$  is the 4<sup>th</sup> digit of your student Id# . If  $k = 0$  then choose  $k = 1$ .)**