

INDRAPRASTHA INSTITUTE OF INFORMATION TECHNOLOGY DELHI  
ECE 111 DIGITAL CIRCUITS  
(SECTIONS A and B)  
QUIZ 1

Date: January 22, 2021

Time: 5:45PM to 6:15PM

- Q1. For the logic circuit shown in Fig, 1, derive the output Z in terms of input A, B and S. By means of a timing diagram, show the signal outputs for Z as functions of three inputs. Use all eight possible combination of inputs. (15)

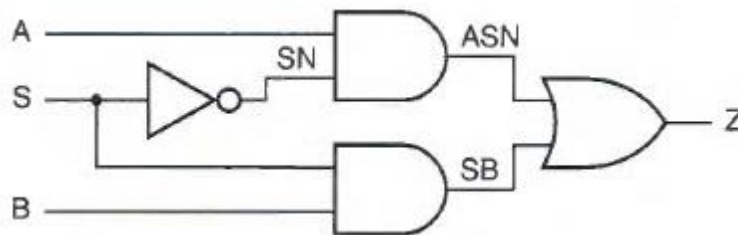


Fig. 1

- Q2. Write the truth table for the logic function  $F(x,y,z)$  given below.

$$F = (\overline{\bar{x}} \cdot y + \bar{x} \cdot \bar{y}) \cdot x + y \cdot z \quad (10)$$