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
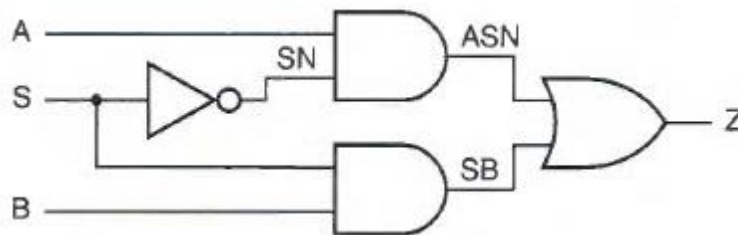   three inputs. Use all eight possible combination of inputs.   (15)

Fig. 1

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

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