#### 1

## Assignment 1

# Abhishek Thakur EE20RESCH11014

#### Download the codes from

 $https://github.com/abhishekt711/FPGA\_Lab/\\Assignment\_1$ 

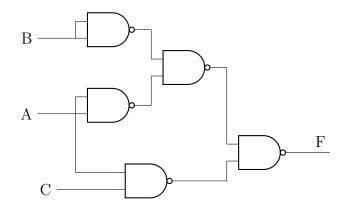
### 1 Question:6(a)

Draw the Logic Circuit of the following Boolean Expression:

$$\bar{A}\bar{B} + AC \tag{1}$$

#### 2 Solution

The logic circuit for the boolean function  $\bar{A}\bar{B}+AC$  can be drawn using only NAND gate as:



$$F = \overline{\overline{A}\overline{B}\overline{A}C}$$
 (2)

$$F = \overline{\overline{A}\overline{B}} + \overline{\overline{AC}}$$
 (3)

$$F = \bar{A}\bar{B} + AC \tag{4}$$