

Q5. Algebraic division helps simplify Boolean functions if we follow polynomial rules of real numbers and apply them to Boolean network.

- a. How is Boolean division different from Algebraic Division? Give a list of lemmas of Boolean functions that do not apply to Algebraic Division. [2]
- b. Divide the given function with the divisor, $\mathbf{D = a + b}$ and express the function as $F = Q.D + R$
 $\mathbf{F = ab + ac + ad' + bc + bd'}$ [4]
