Student Name: **Instructor: Mustafa Altun**

Student ID:

Date: 02/06/2022

EHB322E Digital Electronic Circuits
QUIZ II

Duration: 60 Minutes
For your answers please use the space provided in the exam sheet
GOOD LUCK!

Consider the circuit having the output *F* and the inputs **A** and **B** shown below.
- Suppose that all NMOS transistors are identical and all PMOS transistors are identical.
  Equivalent resistor for an NMOS transistor: R_N= **8kΩ**
  Equivalent resistor for a PMOS transistor: R_P= **24kΩ**
- Suppose that each circuit node (including outputs) has a capacitance value of **1pF**.

Calculate the worst-case and the best-case propagation delays at the output, **t$_{PLH}$** and **t$_{PHL}$** values (total of 4 values).