

Name: **SOLUTION**

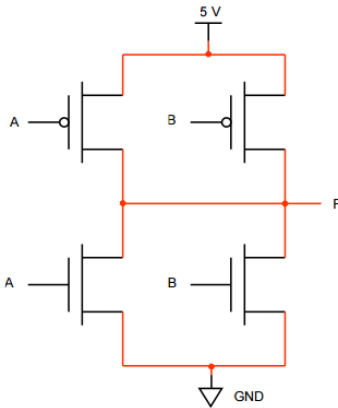
Reg. No: _____

Quiz #2

8th Jun 2018

- CMOS circuits are extensively used for ON-chip computers mainly because of their extremely
 - low power dissipation
 - high noise immunity
 - large packing density**
 - low cost
- Which of following consume minimum power?
 - TTL
 - CMOS**
 - DTL
 - RTL
- How many transistors are required to implement the function $Y = (ABCD)'$.

8 transistors
- _____ can pass logic 1 perfectly, but cannot pass a logic 0.
 - NMOS
 - PMOS**
 - CMOS
 - BJT
- What is the function realized by the implementation shown below:

**No function is realized**

- Compared to bipolar technology, output drive current in CMOS is
 - lower**
 - higher
 - same
 - depend upon fan-in
- How many OR gates are required for a Decimal-to-bcd encoder?
 - 2
 - 3
 - 4**
 - 10
- The difference between a PLA and a PAL is:
 - The PLA has a programmable OR plane and a programmable AND plane, while the PAL only has a programmable AND plane.**
 - The PAL has a programmable OR plane and a programmable AND plane, while the PLA only has a programmable AND plane.
 - The PAL has more possible product terms than the PLA.
 - PALs and PLAs are the same devices belonging to PLD.
- SPLDs, CPLDs, and FPGAs are all which type of device?
 - IC
 - PLD**
 - Programmable devices
 - PLA
- FPGA based design is more suitable for
 - prototype development
 - large scale production
 - low power application
 - high speed application**