Name: **SOLUTION**   Reg. No: _____

   Quiz #3   14th Jun 2018

1. What is the major downfall of microprocessor/DSP systems?
   a) Speed—they are too slow   b) Too much flexibility
   c) Speed—they are too fast   d) Not enough flexibility

2. Classify the following storage devices into one-time programmable (OTP) and those that can be programmed multiple number of times:
   a) SRAM   -   Programmable
   b) fusible-link   -   OTP
   c) antifuse   -   OTP
   d) FLASH   -   Programmable
   e) EPROM   -   Programmable

3. What is a difference between EEPROM and FLASH devices?

   EEPROM erase each individual bit.
   FLASH erase an entire block of data at a time

4. What is the semiconductor technology in which the newest Xilinx FPGA devices have been fabricated?
   a) 65 nm   b) 90 nm   c) 130 nm   d) 150 nm

5. In addition to all the gates and flip-flops available in a CPLD, an FPGA will also contain
   a) Multiplexers   b) flip-flops   c) Look-up tables   d) registers

6. What programmable technology is used in FPGA devices?
   a) SRAM   b) Flash   c) Antifuse   d) all the above

7. Name few of the families of Xilinx FPGA devices.
   # Spartan, Virtex, Kintex, Artix, Zynq

8. Name few of the families of Altera FPGA devices.
   # Cyclone, Max, Stratix

9. Name few of the software's available for design entry and simulation.
   # Active HDL from Aldec
   # Modelsim from Mentor Graphics

10. Name few of the software's available for design implementation in FPGA devices.

    # Xilinx ISE/Vivado from Xilinx

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