

1. Which of the following does NOT provide observability in a system?
 - ☐ An LED connected to a wire in the circuit
 - ☐ A printf() statement in a C program
 - ☐ A breakpoint in an Arduino sketch
 - ☐ A switch connected to an Arduino input pin
2. What is meant by the expression “run control of the target”?
 - ☐ The ability to control the inputs to the target microcontroller
 - ☐ The ability to stop and start the execution of the target microcontroller
 - ☐ The ability to control the outputs of the microcontroller
 - ☐ The ability of the target microcontroller to control its own inputs
3. What is NOT an advantage of using a remote debugger?
 - ☐ Remote debugging allows good run control
 - ☐ Remote debugging provides excellent functional accuracy
 - ☐ Remote debugging requires an extra communication channel for debugging
 - ☐ Remote debugging allows control of registers and memory
4. What is NOT a feature of an embedded debug interface?
 - ☐ Extra pins are needed to support debugging
 - ☐ Breakpoints and watchpoints are supported
 - ☐ Automatic test generation is commonly supported
 - ☐ On-the-fly memory access is supported
5. Which of the following is NOT an advantage of the UART protocol?
 - ☐ Fewer wires are needed for communication as compared to a parallel protocol
 - ☐ Higher data transfer rates are typically achieved compared to a parallel protocol
 - ☐ Fewer pins are needed than using a parallel protocol
 - ☐ A shared clock is not required
6. Which of the following statements is NOT true about the UART protocol?
 - ☐ The baud rate is the maximum number of transitions per second
 - ☐ The data transmission rate is equal to the baud rate
 - ☐ The bit duration is determined by the baud rate
 - ☐ The bit duration is the inverse of the baud rate
7. Synchronization is performed in the UART protocol based on the timing of the Start bit.
 - ☐ True
 - ☐ False
8. An error in bit transmission (perhaps due to noise) may not be detected, even if a parity bit is used.
 - ☐ True
 - ☐ False