

## ESHD: Quiz Week 6

### 1. Which among the following statements are NOT TRUE?

2 points

- (a) Embedded systems need not contain only hardware.
- (b) A digital alarm clock with snooze functionality is an embedded system.
- (c) For all embedded systems, the latency for computation of the result is not a problem as long as it is correct.
- (d) For all embedded systems, the correctness of the result is not a problem as long as the latency is minimal.
- (e) RAM and EEPROM are typically integrated on-chip in a microcontroller
- (f) Very few microcontrollers are sold per year compared to general-purpose microprocessors
- (g) A microcontroller has higher computing power than a typical microprocessor
- (h) A microcontroller has a rich set of on-chip peripherals in comparison to microprocessor.

### 2. What brown out reset (BOR) circuit does by monitoring which of the following:

1 point

- (a) Clock Frequency
- (b) Temperature
- (c) Supply Voltage
- (d) Current Draw

### 3. Describe types of memory used in embedded systems and for what purpose?

2 points

### 4. The input Low-pass filter of a signal conditioner is made of 10k resistor and 100pF capacitor. At what frequency is the Vout error less than 0.1%?? Demonstrate by 2 ways.

5 points