eZWSN - Exploring Wireless Sensor Networking
Possible Exam Questions

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Goal

Confidential, do not distribute. Right answers are written in bold. The more stars a question has, the more difficult it is.

[$\star$] A = 0b01101001
A —= 0b01000100

- **A=0b01101101**
- A=0b00101001
- A=0b00101101

[$\star$] A = 0b01101001
A &= $\sim$0b01000100

- A=0b01101101
- **A=0b00101001**
- A=0b00101101

[$\star$] A = 0b01101001
A $\wedge$= 0b01000100

- A=0b01101101
- A=0b00101001
- **A=0b00101101**

[$\star\star$] The RSSI of a link can easily be predicted from the distance between sender and receiver.

- right

- **wrong**

[⋆⋆] The link probability can easily be predicted from its RSSI.

- **right**
- wrong

[⋆⋆] Entering an MSP430 low power mode means that

- **Clocks are turned off**
- The radio chip is turned off
- LEDs are turned off

[⋆⋆] In preamble sampling

- **The preamble should be longer than the check interval**
- The preamble should be shorter than the check interval

[⋆ ⋆ ⋆] When should I avoid to enter the LPM4 low power mode

- When I previously enabled button interrupts
- **When I previously enabled timer interrupts**

[⋆ ⋆ ⋆] The eZ430-RF2500 consumes (*CC2500 state*:*average current drawn*)

- SLEEP:0.600μA - IDLE:13.6μA - RX:24.2μA - TX:26.0μA
- SLEEP:13.6μA - IDLE:0.600μA - RX:24.2μA - TX:26.0μA
- **SLEEP:0.600mA - IDLE:13.6mA - RX:24.2mA - TX:26.0mA**
- SLEEP:13.6mA - IDLE:0.600mA - RX:24.2mA - TX:26.0mA
- SLEEP:0.600A - IDLE:13.6A - RX:24.2A - TX:26.0A
- SLEEP:13.6A - IDLE:0.600A - RX:24.2A - TX:26.0A