Unit 5
Lecture 5.6 Quiz

1) The key difference between an organic field-effect transistor (OFET) operation and an organic electrochemical transistor (OECT) operation is which of the following?
   a. The OECT operates with a much shorter channel than an OFET.
   b. There is no gate in an OECT as opposed to an OFET.
   c. Ions modulate the OECT channel current as opposed to electrostatic effects in the OFET.
   d. In OECTs there is an electrolyte that serves as the gate, but there are no OFETs that have electrolyte gating.
   e. Both (c) and (d) are correct.

2) In the plot from Khodagholy, D.; Rivnay, J.; et al. Nat. Commun. 2013, 4, 2133, the upper curve has the lowest magnitude of the gate voltage while the bottom curve has the highest magnitude of the gate voltage.
   a. True
   b. False

3) A typical value of the transconductance in an electrolyte-gated PEDOT:PSS OECT is on the order of which of the following.
   a. 0.3 μS
   b. 3.0 μS
   c. 30 μS
   d. 300 μS
   e. 3 mS