Na	ame:EID:
	opic: Digital Genetic Circuits (Week 6) e-discussion questions. Answer briefly. Use only the space provided.
1)	What is the main molecular principle on which the logic gates in Bonnet2013 are based? How do they implement logic? What type of enzyme carries out the key activity needed for logic? What cellular activity is the input and output signal after processing of the logic?
2)	Which of the six logic gates implemented in Bonnet2013 deviates most from their predictions? (There are two best answers.)
3)	What circuit component from the computing / electrical engineering fields is a "transcriptor" named to evoke? (What is analogous?)
4)	Name and draw the truth table for one of the other two-input logic gates that are <b>not</b> discussed in Bonnet2013. (There are 16 total possibilities for two-input logic gates.)  Important: You might want to read the next question before answering!  Do <u>not</u> use an example of a gate where the output is always TRUE or FALSE.
5)	<b>Optional</b> : Draw a design like those pictured in Fig. 2 of Bonnnet2013 that carries out the logic for the truth table you have as an answer to the previous question.