1. What are the 3 Cs, common characteristics of addiction? What reward system pathway is activated by drugs of addiction? What is the primary neurochemical involved in this pathway?

2. What is the effect of ethanol on the brain? Identify the receptors alcohol interacts with together with the class of chemicals it releases that induce euphoria. What does Naltrexone do? What is the leading cause of mental retardation in Western countries?

3. Buprenorphine is a partial agonist. What does this mean? What drug treatment does it generally replace in the treatment of addiction? What are the benefits of using buprenorphine? Why is buprenorphine sometimes mixed with naloxone to treat addiction?

4. What are some signs of opioid overdose? What drug can immediately reverse an opioid overdose and what are its mechanisms of action?

5. What are some of the physiological effects of cocaine and amphetamines on the human cardiovascular and temperature regulating systems? What is cocaine’s mechanism of action on chemical synapses?