

7.98J / 9.30J
Quiz 4

- 1) 2 marks
Draw a diagram of the main excitatory circuitry in the rodent hippocampus.
- 2) 1 mark
What is the **key** feature of NMDA receptors that make them important for synaptic plasticity?
- 3) 2 marks
Which excitatory hippocampal synapses show NMDA receptor dependent synaptic plasticity?
- 4) 5 marks
Discuss the differential roles of NMDA receptors in area CA1 and CA3 in the distinct phases of hippocampus dependent memory (i.e. acquisition, consolidation, recall). Include in your discussion a **description** of the type of genetically engineered mice and behavioral paradigms that have been used in the literature, or that you believe should be made and used in order to elucidate these distinct roles of the NMDA receptor in the hippocampus.