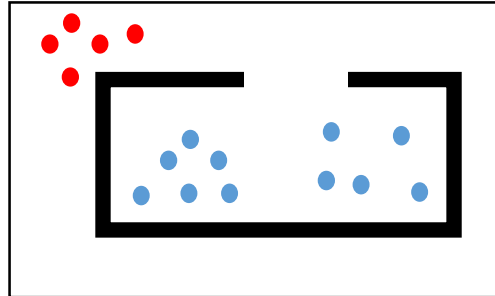# ALS Lab

Gate Special

Part A
i) One red agent entering the gate [1]
ii) One red and one blue agent entering and leaving the gate respectively [2]
iii) 'n' red agents entering the gate [with collision checking between agents and without collision checking with walls] [5]
iv) 'n' red agents entering the gate [with collision checking between agents and with collision checking with walls] [10]

Part B
i) One blue agent coming out with a fixed group of red agents entering with collision checking between agents [1]
ii) 'n' blue agents coming out and 'm' red agents going in [with collision checking between agents and without collision checking with walls] [3]
ii) 'n' blue agents coming out and 'm' red agents going in [with collision checking between agents and with collision checking with walls] [8]
iii) Agents coming in and out with all collision checking, while making a 'to-left' rule [10]

Part C
i) 5 agents coming in and 5 going out with all collision checking while ensuring that no member of any group is separated by more than Δ. [5]
ii) 'n' agents coming in and 'm' going out coming in and out with collision checking while ensuring that no member of any group is separated by more than Δ. [10]