1) To show that 5SAT is NP-Complete we will reduce 3SAT to 5SAT, To start we'll reduce 3SAT to 4SAT by mapping the clause $(a \vee b \vee c)$ to $(a \vee b \vee c \vee d) \wedge (a \vee b \vee c \vee \bar{d})$ where d is any arbitrary set. If $(a \vee b \vee c)$ is satisfied then so is $(a \vee b \vee c \vee d) \wedge (a \vee b \vee c \vee \bar{d})$ and vice-versa. This proves that 4SAT is NP-Complete. Now we will reduce 4SAT to 5SAT using a similar method we will map $(a \vee b \vee c \vee d)$ to $(a \vee b \vee c \vee d \vee e) \wedge (a \vee b \vee c \vee d \vee \bar{e})$ since anything that satisfies both $(a \vee b \vee c \vee d)$ satisfies both $(a \vee b \vee c \vee d \vee e) \wedge (a \vee b \vee c \vee d \vee \bar{e})$ and vice-versa 5SAT is NP-Complete.

2) To show that LPATH is NP-Complete we will reduce HAMPATH to LPATH. Take HAMPATH $= \{(G, a, b)\}$ and reduce it to (G, a, b, k) where k is the number of nodes in G. Since (G, a, b, k) contains a hamiltonian path from a to b of length k & a hamiltonian path is a simple path, $(G, a, b, k) \in LPATH$ and LPATH is NP-Complete.