Peter Schaez | AI - Home work 1 | 9/15/2019

① Chapter 2, Ex 2.3

A) False, An agents goals can still be achievable with partially observable information. see page 42 - "the agents goles may still be achievable, sometimes with uncertainty

B) true, See page 49, if the task environment is un observable then no pure reflex agent can Be rational, reflex agents respond to percepts, if a percept cannot be observed or interpreted then the agent fails to respond.

C) True, Give all possible test environments there will Be a case that every agent will Be rational.

d) False, see page 46, the agent program takes the current percept as an input. the agent function takes the entire percept history.

e) True, Depending on the task. A agent function maps a given percept at an action

F) true, an agent randomly selects actions can be rational in a deterministic task environment the rationality of this agent would depend on its preformance measure and the agent function over the life cycle of the agent.

G) True, AN agent designed to play play sodoku on a nxn board would still function if the board scales in size.

h) False, not every agent is rational in an unobservable environment. a agent may still be able to complete its goals

i) A perfectly rational poker agent cannot account for probability not directly in its favor and can lose a game due to luck