## Questions | Chapter 2

## 1. What is an agent?

Agent is anything that can be viewed as perceiving the environment through sensors and acting upon the environment through actuators.

## 2. What is a rational agent?

For each possible percept sequence, a rational agent should select an action that is expected to maximize its performance measure, given the evidence provided by the percept sequence and whatever built-in knowledge the agent has.

- 3. Draw a diagram showing how an agent interacts with the environment through sensors and actuators.
- 4. What is the difference between percept and percept sequence?

  Percept is the agent's perceptual input at any given instant, and percept sequence is the complete history of everything the agent has ever perceived.
- 5. What is the difference between agent function and agent program?
- 6. For the vacuum cleaner world problem, describe what will be the agent function and agent program?
- 7. For an agent, what is rational at any given time depends on four things. What are they?
- 8. What do P, E, A, and S stand for in the task environment description?
- 9. Define the performance measure, prior knowledge, agent actions, and precept sequence for the vacuum cleaner agent.
- 10. Define the performance measure, environment, actuators, and sensors for a taxi driver agent.