

SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

23AMB201 - MACHINE LEARNING

II YEAR IV SEM

UNIT V – REINFORCEMENT LEARNING

TOPIC 2 - Elements of Reinforcement Learning

Redesigning Common Mind & Business Towards Excellence

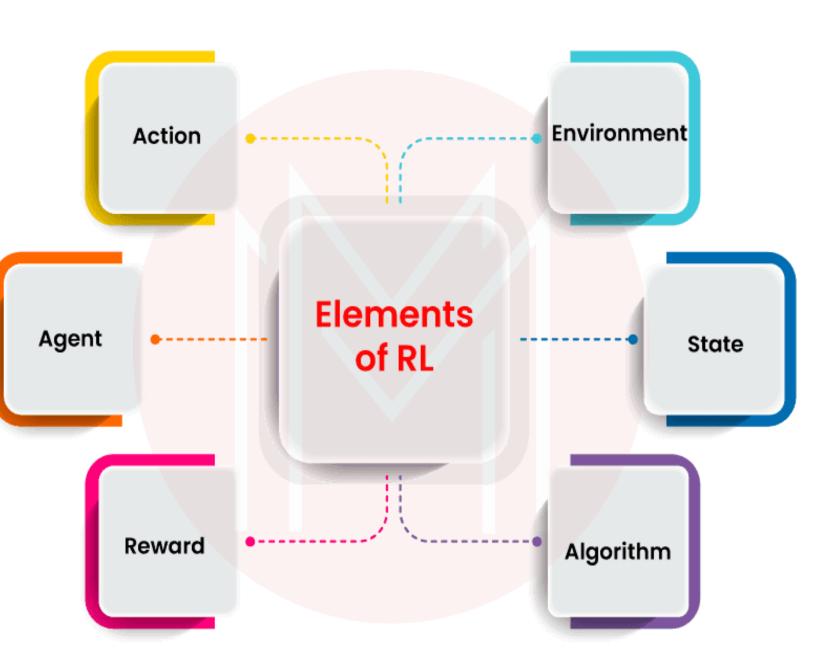


Build an Entrepreneurial Mindset Through Our Design Thinking FrameWork



Elements of Reinforcement Learning





Environment(): A situation in which an agent is present or surrounded by.

Agent(): An entity that can perceive/explore the environment and act upon it.

Action(): Actions are the moves taken by an agent within the environment.

State(): State is a situation returned by the environment after each action taken by the agent.

Policy(): Policy is a strategy applied by the agent for the next action based on the current state.

Reward(): A feedback returned to the agent from the environment to evaluate the action of the agent.

Value(): It is expected long-term retuned with the discount factor and opposite to the short-term reward.

Q-value(): It is mostly similar to the value, but it takes one additional parameter as a current action.