

Artificial Intelligence:-

- Artificial Intelligence (AI) is the intelligence exhibited by machines or software.

- The central goal of AI research include reasoning, knowledge, planning, learning, natural language processing (communication), perception and the ability to move and manipulate objects.

- In simple, computers making decision in real world problems

- Artificial Intelligence

* build & understand intelligent entities or agents

* 2 main approaches $\left\{ \begin{array}{l} \text{Engineering} \\ \text{Cognitive modeling} \end{array} \right.$

Def:-

" Artificial Intelligence is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to methods that are biologically derived.

- DisCIPLINES relevant to AI

* Philosophy, Mathematics, Probability, Economics, Neurosciences, Psychology, Computer engineering, Control theory, Linguistics.

Different types of AI:-

- ① modeling exactly how humans actually think.
- ② modeling exactly how humans actually act.
- ③ modeling how ideal agents "should think"
- ④ modeling how ideal agents "should act"

Thought	System that think like humans	Systems that think rationally
Behaviour	System that act like humans	System that act rationally
	Human	Rational

AI Applications:-

- Autonomous planning & scheduling
 - * Analysis of data
- medicine
 - * Image guided surgery.
 - * Image analysis & enhancement.
- Transportation
 - * Autonomous
 - * vehicle control
 - * Pedestrian detection
- Games
- Robotic toys.
- Bioinformatics
- Natural Language processing.