

Q1- what is Artificial Intelligence? How is it helpful for humanity?

Ans- \* Abbreviation:-

AI stands for Artificial Intelligence.

\* Definition:-

AI is a branch of computer Science that aims to create machines and software capable of performing tasks that typically require human intelligence. These tasks include reasoning, learning, problem-solving, perceptions, language understanding and decision making and many more.

\* History:-

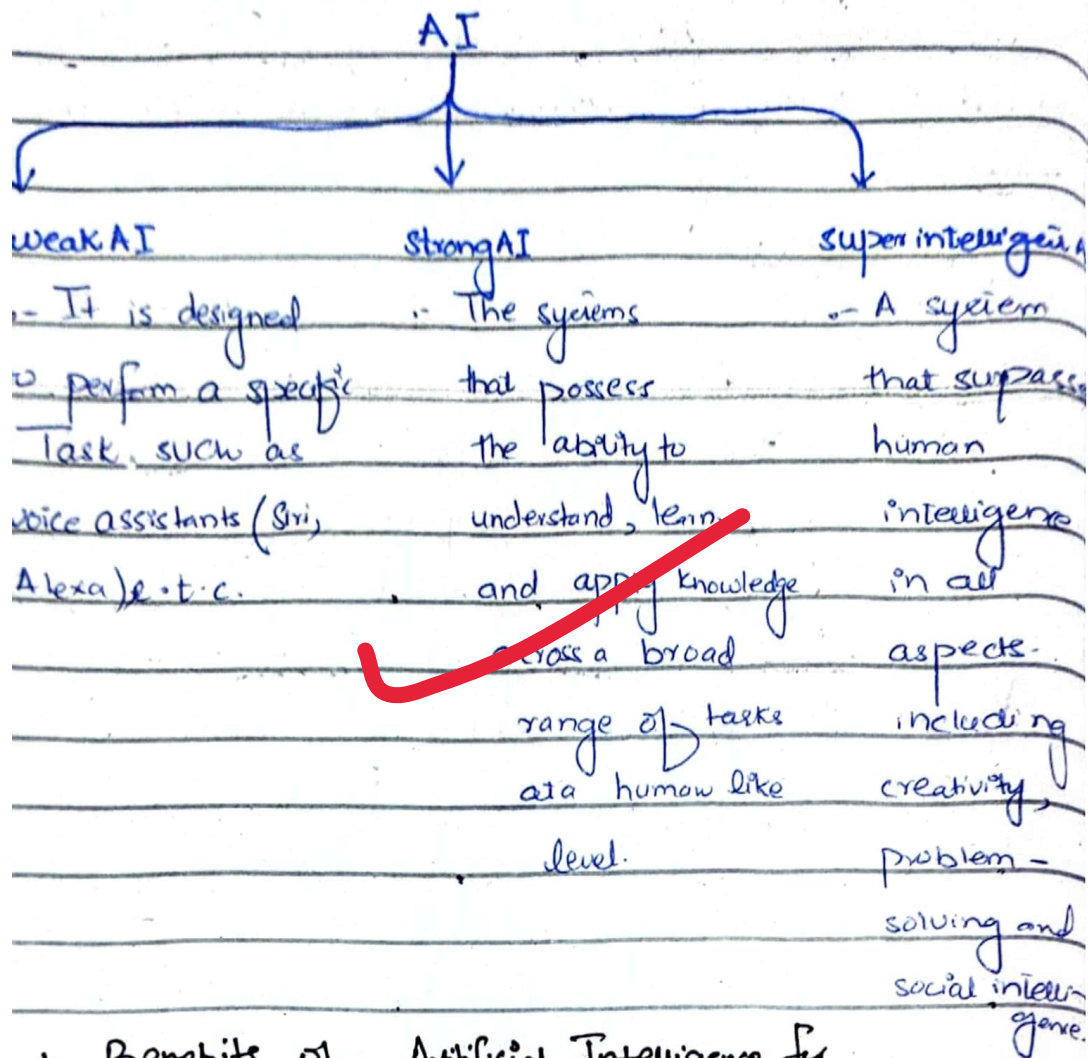
John McCarthy, who coined the term AI in 1956, defines it as "the science and engineering of making intelligent machines", especially intelligent computer programmes.

\* Goals:-

Intelligence is the computational part of the ability to achieve goals. AI gives four possible goals to pursue:

- ✓ systems that think like humans.
- ✓ systems that act like humans.
- ✓ systems that think rationally.
- ✓ systems that act rationally.

\* Types of AI:-



## \* Benefits of Artificial Intelligence for humanity:-

AI has a profound impact on various aspects of human life, enhancing capabilities, improving efficiency and solving <sup>complex</sup> problems. Here are several ways AI is helpful for humanity.

### 1. Healthcare:-

a) Diagnostics:- AI systems can analyze medical images and data to detect diseases early with greater accuracy.

b) Personalized Medicine:- AI can tailor treatments based on individual patient data, improving outcomes and reducing side effects.

### 2. Education:-

a) Administrative efficiency:- AI automates administrative tasks such as grading and scheduling, allowing

educators to focus more on teaching.

b) Accessibility: - AI powered tools can help students with disabilities, such as speech to text for those with hearing impairments.

### 3) Finance: -

a) Fraud detection: - AI systems analyze transaction patterns to detect and prevent fraudulent activities in real time.

b) Investment strategies: - AI algorithms can predict market trends and help investors making informed decisions, optimizing portfolio management.

### 4) Public Safety: -

a) Disaster Response: - AI aids in disaster prediction, management and recovery providing timely information to coordinate relief efforts.

b) Crime Prevention: - AI analyzes data to identify crime hotspots and predict criminal activity, helping law enforcement agencies allocate resources effectively.

### 5) Environment: -

a) Energy efficiency: - AI optimizes energy usage in buildings and industries, reducing waste and promoting sustainability.

b) Wildlife Conservation: - AI analyzes data from camera traps and sensors to monitor wildlife and combat poaching.