



INDIAN SCHOOL AL WADI AL KABIR

Class: VIII	Department : Computer Science	Year :2025-2026
Handout	Subject:Computer Science Topic: AI domains	

1. What is intelligence?
Intelligence is the ability to gain information and knowledge from thoughts, experiences and the senses.
2. Define human intelligence.
Human intelligence is the intellectual power of humans.
It gives them the cognitive abilities to learn ,form concepts, understand and act.
3. What are the features of human intelligence?
 - a) Humans can interpret incomplete data
 - b) Humans can make sense from contradictory data
 - c) Humans can analyse and refine uncertain data
 - d) Humans can learn from mistakes.
4. Define Artificial intelligence.
Artificial intelligence refers to an artificial creation of human like intelligence that can learn ,reason ,plan, perceive ideas, and process natural language. Similar to humans these machines can also learn understand and reason things out.
5. What is the difference between weak and strong Artificial Intelligence?
Weak Artificial Intelligence:They scan or listen for things that are similar to what they know and respond to them accordingly. It is a human-like feature but still cannot take its own decisions.
Strong Artificial Intelligence:Strong AI has been a crucial part of the AI Revolution.It functions very much like a human brain as it can learn and adapt to different situations.
6. Explain how the game of Rock Paper and scissors work?
In the game of 'Rock Paper Scissors', each player throws one of the three moves (usually by making the appropriate hand shape on the count of three), at the same time. If the move made by a player is not beaten by any other, that player wins.
7. What is Natural Language Processing? How does it work?
Natural Language Processing (NLP) is a sub-field of Artificial Intelligence concerned with the interactions between computers and human (natural) languages. In this, system learn to understand natural language by analysing a set of examples.
How it works:
 - a) Takes text as input
 - b) Cleans and processes the text
 - c) Converts words into numbers
 - d) Uses AI models to understand meaning
 - e) Gives output like translations, answers, or emotions
 - f) It's how tools like chatbots, translators, and voice assistants work!
8. What is computer vision? What is it used for?

Computer Vision (CV) is a domain of AI that deals with how computers can be made to gain high-level understanding from digital images or videos. It is used for replicating the complexity of the human vision system and enabling computers to identify and process objects in images and videos in the same way that humans do.

9. What is data analysis and how is AI used in it?

Data Analysis refers to reviewing data from past events for patterns. AI analyses data, make assumptions, learns and provide predictions at a scale and detail that is impossible for any individual human analyst. A google search, a passport scan or online shopping history all of these contain data that can be collected and analysed.

10. Name the main domains of AI.

- a) Data
- b) Natural Language Processing
- c) Computer Vision