Advanced 2 - Reading comprehension: article on artificial intelligence

Class Objective: I will be able to read the passage and answer the questions based on it.

Concept A : Read and understand the below passage:

Most people are not very familiar with the concept of artificial intelligence (AI). As an illustration, when 1,500 senior business leaders in the United States in 2017 were asked about AI, only 17 percent said they were familiar with it. A number of them were not sure what it was or how it would affect their particular companies. They understood there was considerable potential for altering business processes, but were not clear how AI could be deployed within their own organizations. Although there is no uniformly agreed upon definition, AI generally is thought to refer to "machines that respond to stimulation consistent with traditional responses from humans, given the human capacity for contemplation, judgment and intention." According to researchers Shubhendu and Vijay, these software systems "make decisions which normally require a human level of expertise" and help people anticipate problems or deal with issues as they come up. As such, they operate in an intentional, intelligent, and adaptive manner.

Artificial intelligence algorithms are designed to make decisions, often using real-time data. They are unlike passive machines that are capable only of mechanical or predetermined responses. Using sensors, digital data, or remote inputs, they combine information from a variety of different sources, analyze the material instantly, and act on the insights derived from those data. With massive improvements in storage systems, processing speeds, and analytic techniques, they are capable of tremendous sophistication in analysis and decision making.

Al systems have the ability to learn and adapt as they make decisions. In the transportation area, for example, semi-autonomous vehicles have tools that let drivers and vehicles know about upcoming congestion, potholes, highway construction, or other possible traffic impediments. Vehicles can take advantage of the experience of other vehicles on the road, without human involvement, and the entire corpus of their achieved "experience" is immediately and fully transferable to other similarly configured vehicles. Their advanced algorithms, sensors, and cameras incorporate experience in current operations, and use dashboards and visual displays to present information in real time so human drivers are able to make sense of ongoing traffic and vehicular conditions. And in the case of fully autonomous vehicles, advanced systems can completely control the car or truck, and make all the navigational decisions.

Al plays a substantial role in national defense. Through its Project Maven, the American military is deploying AI "to sift through the massive troves of data and video captured by surveillance and then alert human analysts of patterns or when there is abnormal or suspicious activity." According to Deputy Secretary of Defense Patrick Shanahan, the goal of emerging technologies in this area is "to meet our