

**BCM SCHOOL BASANT AVENUE, DUGRI ROAD, LUDHIANA**  
**CLASS-IX**  
**SUBJECT- ARTIFICIAL INTELLIGENCE (417)**  
**ASSIGNMENT -1**

1) Artificial Intelligence is about\_\_\_\_\_.

- a. Playing a game on Computer
- b. Making a machine Intelligent**
- c. Programming on Machine with your Own Intelligence
- d. Putting your intelligence in Machine

2. Who is known as the -Father of AI"?

- a. Fisher Ada
- b. Alan Turing
- c. John McCarthy**
- d. Allen Newell

3. A technique that was developed to determine whether a machine could or could not demonstrate the artificial intelligence known as the\_\_\_\_\_

- a. Boolean Algebra
- b. Turing Test**
- c. Logarithm
- d. Algorithm

4. Which of the following is the common language for Artificial Intelligence?

- a. LISP    b. **PYTHON**    c. C    d. JAVA

5. How many types of Machine Learning are there?

- a. 1
- b. 2
- c. 3
- d. 4

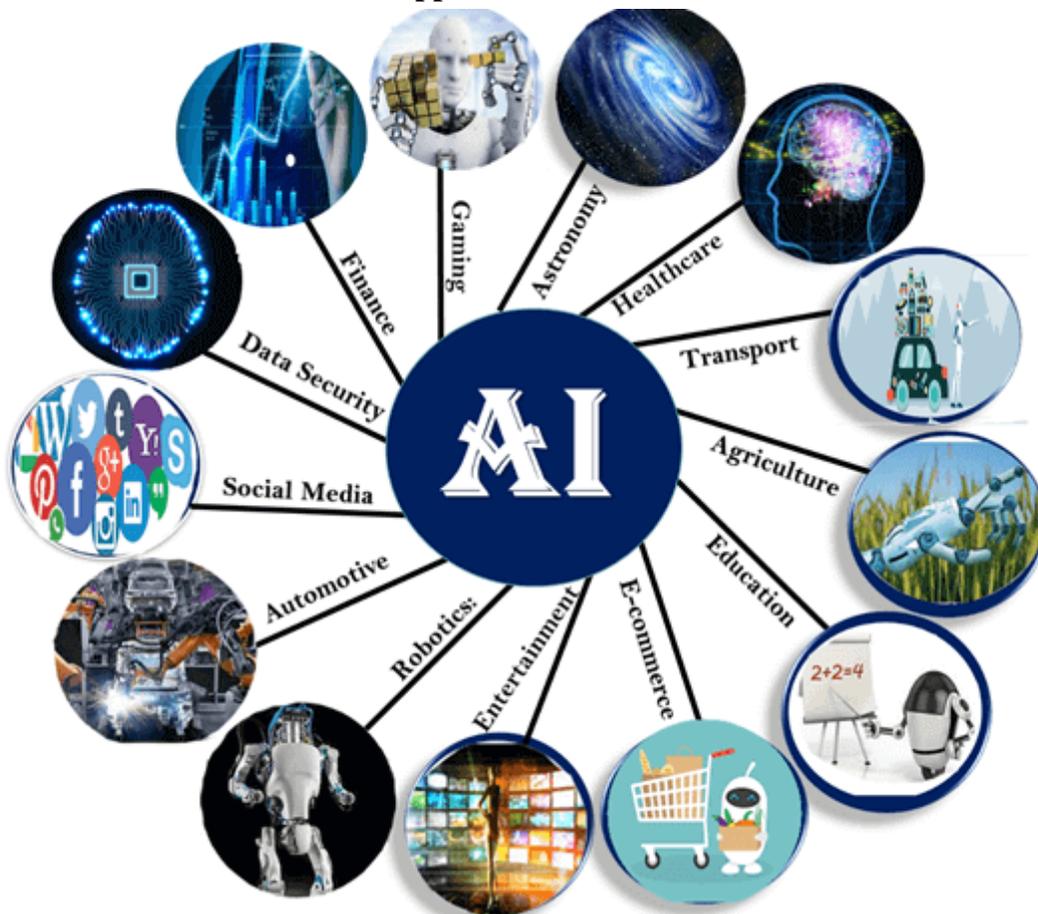
## 6. What is AI?

When a machine possesses the ability to mimic human traits, i.e., make decisions, predict the future, learn and improve on its own, it is said to have artificial intelligence.

## 7. What are the different domains of AI?

1. Data Science/ Big Data - Data sciences is a domain of AI related to data systems and processes, in which the system collects numerous data, maintains data sets and derives meaning/sense out of them. The information extracted through data science can be used to make a decision about it
2. Computer Vision -The Computer Vision domain of Artificial Intelligence, enables machines to see through images or visual data, process and analyze them on the basis of algorithms and methods in order to analyze actual phenomena with images
3. Natural Language Processing (NLP)- In NLP, we teach machines how to understand and communicate in human language. Natural language refers to speech analysis in both audible speeches, as well as text of a language. NLP systems capture meaning from an input of words (sentences, paragraphs, pages, etc.)

## 8. What are the various applications of AI?



## 9. What are the different types of Approaches taken for building AI?

1. Rule-Based approach: Refers to the AI modelling where the rules are defined by the developer. The machine follows the rules or instructions mentioned by the developer and performs its task

accordingly. A drawback/feature for this approach is that the learning is static. The machine once trained, does not take into consideration any changes made in the original training dataset. That is, if you try testing my machine on a dataset which is different from the rules and data you fed at the training stage, the machine would fail on it and will not learn from its mistakes. Once trained, the model cannot improvise itself on the basis of feedback.

2. **Learning-Based approach:** Refers to the AI modelling where the machine learns by itself. Under the Learning Based approach, the AI model gets trained on the data fed to it and then is able to design a model which is adaptive to the change in data. That is, if the model is trained with X type of data and the machine designs the algorithm around it, the model would modify according to the changes which occur in the data so that all the exceptions are handled in this case.