# **Worksheet -1 Deep Learning**

1)D

2) D

3) C

4) A

5)A

6)D

7) B

8) A

9) ACD

10) ABD

11) **Deep Learning** - It is subpart of the machine learning which is inspired by the structure and function of the brain. It uses multiple layers to progressively extract higher level features from the raw input.

12) **Reinforcement Learning**-Reinforcement learning is an area of Machine Learning. It is about taking suitable action to maximize reward in a particular situation. It is employed by various software and machines to find the best possible behaviour or path it should take in a specific situation. Reinforcement learning differs from the supervised learning in a way that in supervised learning the training data has the answer key with it so the model is trained with the correct answer itself whereas in reinforcement learning, there is no answer but the reinforcement agent decides what to do to perform the given task. It is all about making decisions sequentially. In simple words we can say that the output depends on the state of the current input and the next input depends on the output of the previous input.

13) What Are the Differences Between Machine Learning and Deep Learning?

Ans- Machine learning and deep learning are both subset of Artificial Intelligence. Deep Learning is subset of machine learning and functions in a similar way

1. Machine learning works on model whereas deep learning works on networks
2. Machine learning uses algorithms to parse data, learn from that data, and make informed decisions based on what it has learned whereas Deep learning structures algorithms in layers to create an "artificial neural network” that can learn and make intelligent decisions on its own.

14) A **Perceptron** is an algorithm for supervised **learning** of binary classifiers. This algorithm enables neurons to **learn** and processes elements in the training set one at a time. There are two types of **Perceptron**: Single layer and Multilayer.

15) Artificial Intelligence is a technique or study of how to train the computers so that computers can do things which humans can do .AI is the system which is tried to achieve by the help of machine learning. It is decision making and It leads to develop a system to mimic human to respond behave in a circumstances.

Machine Learning is said to learn from the experience. The goal of the machine learning is to take data on certain task and work on the performance to increase it , so that machine can do the things efficiently. It has lots of algorithm which help in deciding the performance of the machine.

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