**DEEP LEARNING**

WORKSHEET-1

1. (D)

2. (B)

3. (C)

4. (A)

5. (A)

6. (A)

7. (B)

8. (A)

9. (A,B,D)

10. (B,D)

11. Deep learning is a class of machine learning. In deep learning information are processed through many layers to understand the features of data more deeply. Basically, deep learning algorithms are neural network where all the neurons are interconnected and organized in layers, that is each neuron is connected to each other and passing the information. It performs well with large amounts of data.

12. Reinforcement learning is an area of Machine Learning. It is takes suitable action to maximize accuracy in a particular 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. In the absence of a training dataset, it is bound to learn from its experience.

13. **Deep learning:** it performs well with large amounts of data. In deep learning feature extraction is done by machine itself. In deep learning neurons are used to understand the representation and feature extraction.

**Machine learning:** It does not perform well with large amounts of data because after a saturation point, it stops improving the result. In machine learning we manually extract the features. Neurons are not used in machine learning.

14. A perceptron was a form of neural network. Perceptron can able to learn, make decisions and translate languages. In perceptron model some sets of inputs are going to neuron and gives a single output.

15. **Artificial intelligence:** it is a study of how to train computers so that computers can do all the capabilities that human contain. Basically, it mimics human behaviour. Its aim is to increase the rate of success. It finds optimal solution. The goal is to simulate natural intelligence to solve complex problems.

**Machine learning:** it is a learning in which machine can learn by its own without being explicitly programmed. Its aim is to increase the rate of accuracy not success. It finds only solution which may be optimal or may not be. The goal is to learn from the given data and maximize the performance of the machine on the given task.