1 (d)

2 (d)

3 (c)

4 (a)

5 (a)

6 (c)

7 (b)

8 (a)

9 (a) (d)

10 (b)

11 What is Deep Learning?

**Deep Learning** is a subfield of machine learning concerned with algorithms inspired by the structure and function of the brain called **artificial neural networks**.

12 What is 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 behavior or path it should take in a specific situation.

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

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Machine Learning** | **Deep Learning** |
| **Data Dependency** | Although machine learning depends on the huge amount of data, it can work with a smaller amount of data. | Deep Learning algorithms highly depend on a large amount of data, so we need to feed a large amount of data for good performance. |
| **Execution time** | Machine learning algorithm takes less time to train the model than deep learning, but it takes a long-time duration to test the model. | Deep Learning takes a long execution time to train the model, but less time to test the model. |
| **Hardware Dependencies** | Since machine learning models do not need much amount of data, so they can work on low-end machines. | The deep learning model needs a huge amount of data to work efficiently, so they need GPU's and hence the high-end machine. |
| **Feature Engineering** | Machine learning models need a step of feature extraction by the expert, and then it proceeds further. | Deep learning is the enhanced version of machine learning, so it does not need to develop the feature extractor for each problem; instead, it tries to learn high-level features from the data on its own. |
| **Problem-solving approach** | To solve a given problem, the traditional ML model breaks the problem in sub-parts, and after solving each part, produces the final result. | The problem-solving approach of a deep learning model is different from the traditional ML model, as it takes input for a given problem, and produce the end result. Hence it follows the end-to-end approach. |

14. What is a perceptron

In machine learning, the **perceptron** is an algorithm for supervised learning of binary classifiers. ... It is a type of linear classifier, i.e. a classification algorithm that makes its predictions based on a linear predictor function combining a set of weights with the feature vector.

15. What’s the difference between AI and ML?

If **AI is** when a computer can carry out a set **of** tasks based on instruction, **ML is** a machine's ability to ingest, parse, and learn from that data itself in order to become more accurate or precise about accomplishing that task.