Video 1

Q1. What is perception?

Ans: Perception is the ability to become aware of something through the senses.

Q2. How deep learning is differ from machine learning?

Deep learning is a subset of machine learning. Machine learning implement many learning algorithms but deep learning strictly implements neural networks such as ANN.

Q3. Describe some of human perceptions.

Some of the most important human perceptions are vision, speech, ear (Speech Recognition) and text.

Video 2

Q1. Why we said that in deep learning data is considered as oil?

Ans. Data is considered as oil because of its higher cost with large amount of data, we can make better perception, decision and accuracy

Q2. What do we mean by the instances of data?

Ans. Each example in training data is considered as instance of training data.

Q3. What is annotated data?

Ans. Loosely speaking, labeled data is known as annotated data

Video 3

Q1. Write some application of Deep learning?

Ans. Some of the deep learning applications include.

->Self driving cars

->language processing

->Face Recognition

->Text Recognition

->Fraud Detection

Q1. Is deep learning only solve big problems?

Ans. No, it can be applied on small everyday problems too. All we need is large amount of data.

Video 4

Q1. Write steps of deep learning frame work.

Ans. Deep learning consists on the following steps

1. Classification
   1. Choose a classifier such as Logistic Classifier
   2. Stochastic optimization: reduce errors and improve accuracy
   3. Data and parameter tuning: Fine tune the data features
2. Deep Networks
   1. DNs: Collaborate layers that perform task of similar level
   2. Regularization: Understand how sub-problems will solve the parent problem
3. Computer Vision
   1. Convolutions
   2. Neural Networks
4. Text Processing
   1. Recurrent Neural Networks
   2. Embeddings

Longest Short-term memoryQ2. What is difference in classification and regression?

Ans. In Classification, output is discrete e.g. text. In Regression, output is variable and looks like a calculated result e.g. decimal value

Q3. How neurons work? What are perceptron ( google it )

Ans. Neurons are responsible for sending information from brain to body. It takes up information, processes it and then transmit it through electro-chemical signals. Perceptron is a mathematical model of a biological neuron in which the electrical signals are represented as numerical values which are sent to other perceptron.

Video 5

Q1. What is linear classification?

Ans. To differentiate between different form of data we use a straight line to do so this is called linear classification

Q2. What are hidden layers in deep learning? (google it)

Ans. Layers residing in-between input and output layer of neurons are called hidden layers. These are called so because they are not computationally visible from neither input layer nor output layer.

Q3. What is bias and what is weight? (google it ).

Ans. In neural networks, with each input a weight is associated. The weights shows the effectiveness of a particular input. More the weight of the input more it will have impact for a particular output value. On the other hand, bias is like the intercept added in a linear equation. It is used to adjust the output along with the inputs to the neuron. Therefore, bias is a constant which help the model in a way that it can fit best for the given data.