

Module-5

- 1) What is the basic building block of a neural network?
- 2) Explain Unit with a neat block diagram
- 3) Elaborate on how a unit can be considered as a basic building of a neural network.
- 4) Illustrate neural network in terms of vector form.
- 5) Illustrate evaluating the output of the Neural Network
- 6) Discuss training of a neural network
- 7) Describe different types of loss functions
- 8) Discuss the different activation functions.
- 9) Write the equations of convolution operation of 1-D and 2-D data.
- 10) Justify the usage of pooling operation in Convolution neural networks
- 11) Distinguish between Convolution and fully connected layers
- 12) Illustrate Convolution-Detector-Pooling Building Block
- 13) Elaborate on complete convolution neural network architecture
- 14) Write different types of convolution variants
- 15) Elaborate on the intuition behind the CNN's
- 16) Illustrate RNN basics for recurrence using previous hidden state
- 17) Illustrate RNN basics for recurrence using previous output
- 18) Elaborate on Training RNNs Using previous hidden state

- 19) Elaborate on Training RNNs Using previous output
- 20) Explain Training RNNs from a single output for the entire input sequence
- 21) Illustrate the working of Bidirectional RNN's
- 22) Training RNNs suffers from the challenges of vanishing and explosion of gradients. Justify
- 23) Reason out the usage of gradient clipping
- 24) Elaborate on LSTM RNN's
- 25) Explain GAN with a block diagram
- 26) Write the applications of NLP