

1	What are the characteristics of a neural network? Explain with example.
2	Explain sigmoid Activity function with example & diagram.
3	How to build invariance into neural network design. Explain three popular techniques.
4	What is competitive learning? How we can represent it in geometric form.
5	How we can make a system learn the task of function approximation. Show with example & figure.
6	For a single layer Perceptron explain the Adaptive filtering problem with the help of a signal flow graph.

1	What is back propagation algorithm? Give the details of forward & backward computation.
2	What are various heuristics for making the back propagation algorithm perform better.
3	Discuss various network-pruning techniques.
4	What are the virtues and limitations of the most popular algorithm of supervised training of multilayer Perceptrons?
5	Explain convolutional networks with example & diagram.