

UNIT-II

S.No	Questions	BT	CO	PO
Part – A (Short Answer Questions)				
1	What is multilayer network	L1	CO2	PO1
2	What is interpolation?	L1	CO2	PO1
3	What is Learning Rate ?	L1	CO2	PO1
4	What is radial basis function?	L1	CO2	PO1
5	What is the Curse of Dimensionality	L1	CO2	PO1
6	What is spline?	L1	CO2	PO1
7	Write any two activation functions used in multi layer perceptron	L1	CO2	PO1
8	What is gradient descent?	L1	CO2	PO1
9	If the input to a single-input neuron is 2.0, its weight is 2.3 and its bias is – 3. Then find the net input to the transfer function?	L1	CO2	PO1
10	Interpret a Sigmoid Function and Threshold unit?	L1	CO2	PO1
11	What is Delta Rule?	L1	CO2	PO1

S.No	Questions	BT	CO	PO
Part – B (Long Answer Questions)				
1	Explain the Multi-layer perceptron with an example.	L2	CO2	PO1
2	Deriving the back-propagation algorithm	L3	CO2	PO1
3	Describe the construction of Radial Basis Function Network with an example	L1	CO2	PO1, PO2
4	Write the Multi-layer Perceptron algorithm	L3	CO2	PO2
5	Explain the Support Vector Machine.	L3	CO2	PO1, PO2
6	Illustrate the RBF Network in detail	L3	CO2	PO1
7	What are the advantages and disadvantages of Support Vector Machine	L1	CO2	PO2
8	Assume that the neurons have the sigmoid activation function to perform forward and backward pass on the network. And also assume that the actual output of y is 0.5. calculate the forward propagation and error	L3	CO2	PO2
<p>The diagram shows a feedforward neural network with two input nodes, two hidden nodes, and one output node. The input nodes are labeled $x_1=0.35$ and $x_2=0.7$. The hidden nodes are labeled h_1 and h_2. The output node is labeled o_3. The weights are: $w_{11}=0.2$, $w_{12}=0.2$, $w_{21}=0.2$, $w_{22}=0.3$, $w_{13}=0.3$, and $w_{23}=0.9$.</p>				
9	Outline the steps to determine the linear decision boundary for separating two classes in a feature space using the Support Vector Machine	L3	CO2	PO2