



**SAGAR INSTITUTE OF SCIENCE & TECHNOLOGY(SISTec)  
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**ASSIGNMENTS-2**

**BRANCH** CSE

**SESSION**

**NAME OF THE FACULTY:**

**SUBJECT/CODE :**

Sr. No.	Enrollment No.	Set Number
1	0187CE201038,40,76,95,0187cs201002,03	SET-1
2	0187cs201004,05,06,07,09,10	SET-2
3	0187cs201011,12,13,15,16, 17	SET-3
4	0187cs201019,20,21,22,23,24	SET-4
5	0187cs201025,26,27,28,29,30	SET-5
6	0187cs201031,32,34,35,36,38	SET-6
7	0187cs201039,40,41,43,44,45	SET-7
8	0187cs201047,48,51,52,53,54	SET-8
9	0187cs201055,56,58,59,60,61	SET-9
10	0187cs201062,63,0536cs2012,14,41,60	SET-10

## UNIT-2

Q No.	QUESTIONS	Bloom's Taxonomy Level	Cours e Outcomes
SET 1			
1.	Compare Simple Neural Network and Deep Neural Network. Why deep learning is getting importance over traditional machine learning approaches.	2(Understanding)	CO2
2.	Identify the role of activation function in neural networks? Define different types of activation functions.	1(Remembering)	CO2
3.	For the given network: One input neuron with input, $x=3$ One hidden neuron and One output neuron Initial weights = 1 Target Output= 15 By applying back propagation algorithm, draw the diagram of the network and calculate the values of (activation function is identity activation function) updated weights for one cycle.	3(Applying)	CO2
SET 2			
1.	Illustrate the role of weights and bias in neural network.	2(Understanding)	CO2
2.	Explain Perceptron model. Which rule is used for weight updating in Perceptron? Give the definition of this rule.	1(Remembering)	CO2
3.	For the given network: One input neuron with input, $x=3$ One hidden neuron and One output neuron Initial weights = 1 Target Output= 5 By applying back propagation algorithm, draw the diagram of the network and calculate the values of updated weights for one cycle.	3(Applying)	CO2
SET 3			
1.	What is gradient descent algorithm? Also explain how it help to find the minimum cost function?	1(REMEMBERING)	CO2
2.	How computation graph is used to find the backward changes? Explain with suitable example.	3(APPLYING)	CO2
3.	For the given network: One input neuron with input, $x=3$ One hidden neuron and One output neuron Initial weights = 1 Target Output= 5	3(APPLYING)	CO2

	By applying back propagation algorithm, draw the diagram of the network and calculate the values of updated weights for one cycle.		
SET 4			
1.	Discuss feed-forward neural network with diagram.	2(UNDERSTANDING)	CO2
2.	Discuss different weight initialization methods used to initialize weight in a deep neural network.	2(UNDERSTANDING)	CO2
3.	For the given network: One input neuron with input, $x=3$ One hidden neuron and One output neuron Initial weights = 1 Target Output= 5 By applying back propagation algorithm, draw the diagram of the network and calculate the values of updated weights for one cycle.	3(APPLYING)	CO2
SET 5			
1.	Relate the use of non-linearity in Deep learning architecture.	1(REMEMBERING)	CO2
2.	Write the algorithm for back propagation	1(REMEMBERING)	CO2
3.	For the given network: One input neuron with input, $x=3$ One hidden neuron and One output neuron Initial weights = 1 Target Output= 5 By applying back propagation algorithm, draw the diagram of the network and calculate the values of updated weights for one cycle.	3(APPLYING)	CO2
SET 6			
1.	Explain locally Weighted linear regression	1(REMEMBERING)	CO2
2.	Explain with example classification using back propagation algorithm.	1(REMEMBERING)	CO2
3.	For the given network: One input neuron with input, $x=3$ One hidden neuron and One output neuron Initial weights = 1 Target Output= 5 By applying back propagation algorithm, draw the diagram of the network and calculate the values of updated weights for one cycle.	3(APPLYING)	CO2
SET 7			
1.	Explain Perceptron model. Which rule is used for weight updation in	1(REMEMBERING)	CO2

	Perceptron? Give the definition of this rule.		
2.	What is gradient descent algorithm? Also explain how it help to find the minimum cost function?	1(REMEMBERING)	CO2
3.	<p>For the given network:</p> <p>One input neuron with input, <math>x=3</math></p> <p>One hidden neuron and One output neuron</p> <p>Initial weights = 1</p> <p>Target Output= 5</p> <p>By applying back propagation algorithm, draw the diagram of the network and calculate the values of updated weights for one cycle.</p>	3(APPLYING)	CO2
SET 8			
1.	Identify the role of activation function in neural networks? Define different types of activation functions.	1(REMEMBERING)	CO2
2.	Explain Perceptron model. Which rule is used for weight updation in Perceptron? Give the definition of this rule.	1(REMEMBERING)	CO2
3.	<p>For the given network:</p> <p>One input neuron with input, <math>x=3</math></p> <p>One hidden neuron and One output neuron</p> <p>Initial weights = 1</p> <p>Target Output= 5</p> <p>By applying back propagation algorithm, draw the diagram of the network and calculate the values of updated weights for one cycle.</p>	3(APPLYING)	CO2
SET 9			
1.	Explain with example classification using back propagation algorithm.	1(REMEMBERING)	CO2
2.	Compare Simple Neural Network and Deep Neural Network. Why deep learning is getting importance over traditional machine learning approaches.	2(UNDERSTANDING)	CO2
3.	<p>For the given network:</p> <p>One input neuron with input, <math>x=3</math></p> <p>One hidden neuron and One output neuron</p> <p>Initial weights = 1</p> <p>Target Output= 5</p> <p>By applying back propagation algorithm, draw the diagram of the network and calculate the values of updated weights for one cycle.</p>	3(APPLYING)	CO2
SET 10			
1.	Identify the role of activation function in neural networks? Define different types of activation functions.	1(REMEMBERING)	CO2
2.	Illustrate the role of weights and bias in neural network.	UNDERSTANDING)	CO2

3.	<p><b>For the given network:</b></p> <p><b>One input neuron with input, <math>x=3</math></b></p> <p><b>One hidden neuron and One output neuron</b></p> <p><b>Initial weights = 1</b></p> <p><b>Target Output= 5</b></p> <p><b>By applying back propagation algorithm, draw the diagram of the network and calculate the values of updated weights for one cycle.</b></p>	3(APPLYING)	CO2