

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-1 EXAMINATION- February -2020

B. Tech. VI Semester (ECE)

COURSE CODE: 19B1WEC631

MAX. MARKS: 15

COURSE NAME: Neural Networks

COURSE CREDITS: 03

MAX. TIME: 1 HRS

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*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

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- Q.1 (a) Explain Neural Network (NN). What are the similarities and differences between NN and artificial neural network (ANN)? Write the benefits of ANN. [CO1] [3]
- (b) What are the characteristic followed by the NN? [CO1] [1]
- Q.2 (a) Explain Gradient descent algorithm. How synaptic weights are updated using Gradient descent method? [CO2] [3]
- (b) Implement NOR and OR gate using Mc-culloch Pitts Neuron Model. [CO2] [3]
- Q.3 (a) What are the features of Hebbian Learning? Explain the mathematical modeling of Hebbian Learning. What is the drawback of Hebbs hypothesis and how it can be eliminated? [CO2] [3]
- (b) What are the different activation functions are employed in ANN, discuss in detail. [CO2] [2]