

Code No: 138DU**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year II Semester Examinations, September - 2020****NEURAL NETWORKS AND DEEP LEARNING****(Common to CSE, IT)****Time: 2 Hours****Max. Marks: 75****Answer any Five Questions
All Questions Carry Equal Marks**

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1. List and explain the various activation functions used in modeling of artificial neuron. Also explain their suitability with respect to applications. [15]
2. Describe the Characteristics of Continuous Hopfield memory and discuss how it can be used to solve Traveling salesman Problem. [15]
3. Explain the architecture and algorithm of full CPN with diagram. [15]
4. Give the Architecture of kohonen self-organizing and explain how it is used cluster the input vectors. [15]
5. Give an example of learning XOR function to explain a fully functioning feed forward network. [15]
6. Explain in detail about the concept of gradient based learning. [15]
7. Write an early stopping meta-algorithm for determining the best amount of time to train. [15]
8. Discuss the application of second-order methods to the training of deep networks. [15]

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