

Manarat International University (MIU)

Department of Computer Science and Engineering

Neural Network and Fuzzy Systems (CSE-433)

Class Test-1 (Fall 2019)

ID Points: 15 Time: 20 minutes

- 1 Explain Contrastive Divergence Algorithm. How do you train a Restricted Boltzmann Machine (RBM) using CD algorithm given 10

$$\nabla_{\mathbf{w}} E(\mathbf{x}, \mathbf{h}) = -\mathbf{h} \mathbf{x}^T$$

- 3 Larochelle et al. found the following results while visualizing the filters of a Restricted Boltzmann Machine on MNIST Dataset. Explain the following result. 5

