

Total No. of Questions : 4]

SEAT No. :

PA-10171

[Total No. of Pages : 1

[6010]-41

**B.E (Computer Engineering) (Insem)**

**DEEP LEARNING**

**(2019 Pattern) (Semester - VIII) (410251)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) Answer Q1 or Q2, Q3 or Q4.
- 2) Figures to the right indicate full marks.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Make suitable assumption whenever necessary.

- Q1)** a) Give co-relation between Artificial Intelligence, Machine Learning, and Deep Learning. Compare Deep Learning with Machine Learning. [5]  
b) Define Deep Learning. Explain pros and cons of using Deep Learning.[5]  
c) Enlist and explain any four popular industrial tools used for Deep Learning. [5]

**OR**

- Q2)** a) How Deep Learning works in three figures explain with example? Also explain common architectural principles of Deep Network. [5]  
b) Write Short Note on: Under and Over fitting regularization. [5]  
c) Explain various limitations of Machine Learning. [5]

- Q3)** a) What is a Perceptron? What are the steps involved for training a Perceptron in Deep Learning? [5]  
b) Enlist Activation functions used in Deep Neural Network. Explain any two of them in detail. [5]  
c) Write Short Note on: Hyper parameters used in Neural Network. [5]

**OR**

- Q4)** a) Explain how a Neural Networks can be trained with Back propagation and Forward propagation methods. [5]  
b) Define Loss functions used in Deep Neural Network. Enlist and Explain any two of them in detail. [5]  
c) Explain Sentimental analysis in detail. [5]

