PA-10171

[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]**

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