SEAT No. :

PB-263

[6270]-51

B.E. (Computer Engineering) (Insem)
DEEP LEARNING
(2019 Pattern) (Semester-VIII) (410251)

Time : 1 Hour] *[Max. Marks : 30*

Instructions to the candidates :

1) Answers Q.1 or Q.2, Q.3 or Q.4.
2) Figures to the right side 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 Supervised and Unsupervised Learning. **[5]**

b) What is Deep Learning? Enlist and Explain Challenges of the Deep Learning? **[5]**

c) Enlist and Explain any four popular industrial tools used for Deep Learning.

[5]

OR

Q2) a) Explain how Deep Learning works in three figures with one example. Also Explain Common architectural principles of Deep Network. **[5]**

b) Write Short note on: Bias, Variance and Tradeoff. **[5]**

c) Enlist and Explain any four real life applications of Deep Learning. **[5]**

Q3) a) What is Perceptron? Write short note on Multilayer Feed-Forward network with figure **[5]**

b) Enlist and Explain Different Loss functions used in Neural Network. **[5]**

c) Write short note on PyTorch and Colab. **[5]**

OR

P.T.O.

Q4) a) Compare Back Propagation and Forward Propagation. **[5]**

b) What is Activation Function? Enlist and Explain different Activation functions used in Neural Network. **[5]**

c) Explain Sentimental Analysis and Its types. **[5]**

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