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## [6181]-183

## B.E. (E \& TC Engineering)

## DEEP LEARNING

## (2019 Pattern) (Semester - VII) (Elective-IV) (404185C)

Time: 2½ Hours]
[Max. Marks : 70
Instructions to the candidates:

1) Figures to the right indicate full marks.
2) Neat diagrams must be drawn whenever necessary.
3) Assume suitable data, if necessary.

Q1) a) What is batch normalization? How batch normalization works?
b) Explain Dropout Technique. What is intuition behind dropout?

Q2) a) Write note on Auto Encoder. Explain Architecture of Autoencoders. [9]
b) Distinguish between Autoencoders and Restricted Boltzmann Machine.[8]

Q3) a) What is VGG architecture? How Speed and Accuracy of VGG is greater than AlexNet. Explain.
b) Explain any 3Regulacization techniques for Neural Networks.

Q4) a) Explain DenseNet architecture with its advantages and disadvåntages.[10]
b) How does Batch Normalization work?

Q5) a) What Recurrent neural network? Explain it's architecture in detail?
b) What is LSTM and it's working?

Q6) a) How does Vanishing Gradient problem occurs in RNN.
b) What Are Generative Models? What Are Generative Adversarial Networks? Why Generative Adversarial Networks?

Q7) a) Explain Image classification applications using Transfer leaning architect.
b) Explain Image recognition using deep learning.

Q8) a) Explainsentiment analysis of any social media application?
b) Explain spam mail classification applications using NLAP?

