Total No. of Questions : 8]

SEAT No. :

P-6620

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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? **[8]**

b) Explain Dropout Technique. What is intuition behind dropout? **[9]**

OR

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. **[11]**

b) Explain any 3 Regularization techniques for Neural Networks. **[6]**

OR

Q4) a) Explain DenseNet architecture with its advantages and disadvantages. **[10]**

b) How does Batch Normalization work? **[7]**

Q5) a) What Recurrent neural network? Explain it's architecture in detail? **[10]**

b) What is LSTM and it's working? **[8]**

OR

P.T.O.

Q6) a) How does Vanishing Gradient problem occurs in RNN. **[8]**

b) What Are Generative Models? What Are Generative Adversarial Networks? Why Generative Adversarial Networks? **[10]**

Q7) a) Explain Image classification applications using Transfer leaning architect. **[12]**

b) Explain Image recognition using deep learning. **[6]**

OR

Q8) a) Explain sentiment analysis of any social media application? **[9]**

b) Explain spam mail classification applications using NLP? **[9]**