Total No. of Questions : 4]

SEAT No. :

P8507

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Oct-22/BE/Insem - 105
B.E. (Information Technology)
DEEP LEARNING
(2019 Pattern) (Semester - VII) (414443)

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

Instructions to the candidates:

1) *Answer Q1 or Q2, Q3 or Q4.*
2) *Neat diagrams must be drawn wherever necessary.*
3) *Figures to the right side indicate full marks.*
4) *Assume suitable data, if necessary.*

Q1) a) Draw and explain the architecture of Multilayered Feedforward Neural network. **[5]**

b) What is the need of Regularization? Explain Dropout Regularization. **[5]**

c) Explain the concept of gradient based Learning. **[5]**

OR

Q2) a) What is the problem of vanishing Gradient? Describe various solutions to this problem. **[7]**

b) Explain the working of an Artificial neuron. Also explain the activation functions ReLU and LReLU. **[8]**

Q3) a) Illustrate Convolution operation in CNN with an example. **[5]**

b) Explain the use of padding and strides in pooling layers. **[5]**

c) What is the advantage of weight sharing in CNN. **[5]**

OR

Q4) a) What are pooling layers in CNN? Illustrate Max pooling with an example. **[5]**

b) Discuss applications of CNN. **[5]**

c) Write short note on AlexNet. **[5]**