Name: _____

Score: _____ / _____

Quiz #4

Part 1

Which of the following options can be used to reduce overfitting in deep learning models?
1.Add more data
2.Use data augmentation
3.Use architecture that generalizes well
4.Add regularization
5.Reduce architectural complexity

A.
1, 2, 3

B.
1, 4, 5

C.
1, 3, 4, 5

D.
All of these

Answer Point Value: 2.0 points
Answer Key: D

Which of the following activation functions provides no nonlinearity?

A.
identity

B.
tanh

C.
ReLu

D.
sigmoid

What does a neuron compute in a perceptron?

A.
A function that scales the input linearly

B.
The mean of all inputs followed by a non-linear activation function

C.
A linear function followed by an activation function

D.
A Signum activation function followed by a non-linear activation function

Which of the following can act as possible termination conditions in K-Means?
1. After a fixed number of iterations.
2. When centroids do not change between successive iterations.
3. When RSS falls below a threshold.

A.
1 and 3

B.
1 and 2

C.
2 and 3

D.
1, 2, and 3

E. None of the above

Answer Point Value: 2.0 points
Answer Key: D

What is back propagation?

A.
It is another name given to the activation function in the neuron

B.
It is the transmission of error back through the neural network layers to adjust the inputs

C.
It is the transmission of error back from output nodes to the input nodes to allow weights to be adjusted so that the network can learn

D.
All of the above

Answer Point Value: 2.0 points
Answer Key: C