**Week 4 Quiz**

1. What is the name of the method used to tokenize a list of sentences?

tokenize(sentences)

fit\_to\_text(sentences)

fit\_on\_texts(sentences)

tokenize\_on\_text(sentences)

2. If a sentence has 120 tokens in it, and a Conv1D with 128 filters with a Kernal size of 5 is passed over it, what’s the output shape?

(None, 120, 128)

(None, 116, 124)

(None, 120, 124)

(None, 116, 128)

3. What is the purpose of the embedding dimension?

It is the number of dimensions required to encode every word in the corpus

It is the number of dimensions for the vector representing the word encoding

It is the number of letters in the word, denoting the size of the encoding

It is the number of words to encode in the embedding

4. IMDB Reviews are either positive or negative. What type of loss function should be used in this scenario?

Adam

Binary crossentropy

Categorical crossentropy

Binary Gradient descent

5. If you have a number of sequences of different lengths, how do you ensure that they are understood when fed into a neural network?

Make sure that they are all the same length using the pad\_sequences method of the tokenizer

Specify the input layer of the Neural Network to expect different sizes with dynamic\_length

Use the pad\_sequences object from the tensorflow.keras.preprocessing.sequence namespace

Process them on the input layer of the Neural Network using the pad\_sequences property

6. When predicting words to generate poetry, the more words predicted the more likely it will end up gibberish. Why?

Because you are more likely to hit words not in the training set

Because the probability that each word matches an existing phrase goes down the more words you create

It doesn’t, the likelihood of gibberish doesn’t change

Because the probability of prediction compounds, and thus increases overall

7. What is a major drawback of word-based training for text generation instead of character-based generation?

Because there are far more words in a typical corpus than characters, it is much more memory intensive

Character based generation is more accurate because there are less characters to predict

Word based generation is more accurate because there is a larger body of words to draw from

There is no major drawback, it’s always better to do word-based training

8. How does an LSTM help understand meaning when words that qualify each other aren’t necessarily beside each other in a sentence?

They load all words into a cell state

They shuffle the words randomly

Values from earlier words can be carried to later ones via a cell state

They don’t

**Correct**