

# Quiz review

Started on	Wednesday, 13 March 2024, 4:57 PM
State	Finished
Completed on	Wednesday, 13 March 2024, 5:00 PM
Time taken	2 mins 19 secs
Marks	10.00/10.00
Grade	100.00 out of 100.00

## Question 1

Correct  
Mark 1.00 out of 1.00

Which of the following is NOT a typical use case for RNNs?

- 47562
- ☐ Speech recognition
  - ☐ None of the given options
  - ☒ Image classification✔
  - ☐ Text generation
  - ☐ Time series prediction

The correct answer is: Image classification

## Question 2

Correct  
Mark 1.00 out of 1.00

How do RNNs handle variable-length sequences in NLP?

- 47562
- ☐ By changing the network size
  - ☐ They don't
  - ☐ By skipping them
  - ☒ Through padding and truncation✔
  - ☐ None of the given options

The correct answer is: Through padding and truncation



**Question 3**

Correct

Mark 1.00 out of 1.00

In music generation, what might an RNN be trained to predict?

- ☐ Next instrument
- ☐ Next album cover
- ☐ None of the given options
- ☒ Next note or chord ✓
- ☐ Next song genre

The correct answer is: Next note or chord

**Question 4**

Correct

Mark 1.00 out of 1.00

Which problem arises when training RNNs on long sequences?

- ☐ Overfitting
- ☐ Underfitting
- ☐ High bias
- ☐ All of the given options
- ☒ Vanishing or exploding gradients ✓

The correct answer is: Vanishing or exploding gradients

**Question 5**

Correct

Mark 1.00 out of 1.00

What is the main advantage of LSTM over basic RNN?

- ☐ Faster computation
- ☐ None of the given options
- ☐ More layers
- ☒ Handling long-term dependencies ✓
- ☐ Lower computational cost

The correct answer is: Handling long-term dependencies

**Question 6**

Correct

Mark 1.00 out of 1.00

What is the primary difference between LSTM and GRU?

- ☒ LSTM has input, forget, and output gates; GRU has reset and update gates ✓
- ☐ LSTM is older, GRU is newer
- ☐ LSTM is faster, GRU is slower
- ☐ LSTM is for sequences, GRU is for images
- ☐ LSTM has 3 gates, GRU has 2

The correct answers are: LSTM has 3 gates, GRU has 2, LSTM has input, forget, and output gates; GRU has reset and update gates

**Question 7**

Correct

Mark 1.00 out of 1.00

47562

Which RNN architecture uses a reset and update gate?

- ☐ None of the given options
- ☐ Bidirectional RNN
- ☒ GRU ✓
- ☐ Simple RNN
- ☐ LSTM

The correct answer is: GRU

47562

**Question 8**

Correct

Mark 1.00 out of 1.00

Why might one use GRU over LSTM?

- ☒ GRU is simpler and sometimes faster ✓
- ☐ None of the given options
- ☐ LSTM is outdated
- ☐ GRU is always more accurate
- ☐ LSTM can't handle sequences

47562

The correct answer is: GRU is simpler and sometimes faster

**Question 9**

Correct

Mark 1.00 out of 1.00

In sequence generation tasks, what is the primary input to an RNN at each time step?

- ☒ Previous output ✓
- ☐ Previous error
- ☐ Current weight
- ☐ None of the given options
- ☐ Current input

The correct answer is: Previous output

**Question 10**

Correct

Mark 1.00 out of 1.00

47562

Which of the following is a common application of RNNs in NLP?

- ☐ Image generation
- ☐ Object detection
- ☐ Face recognition
- ☐ Image classification
- ☒ Text generation ✓

The correct answer is: Text generation

47562

[◀ Sequence Generation with RNNs](#)[Case Study - Sentiment Analysis with RNNs ▶](#)

47562