Started on	Friday, 7 February 2025, 12:40 PM
State	Finished
Completed on	Friday, 7 February 2025, 12:42 PM
Time taken	2 mins 52 secs
Marks	10.00/10.00
Grade	**100.00** out of 100.00

Question 1

1.00/1.00

What does RNN stand for?

- Recursive Neural Network
- Recurrent Neural Network ✔
- Random Neural Network
- Regular Neural Network
- None of the options given

The correct answer is: Recurrent Neural Network

Question 2

1.00/1.00

In NLP, what does RNNs help to predict?

- Next song note
- Next image
- Next word ✔
- Next video frame
- None of the options given

The correct answer is: Next word

Question 3

1.00/1.00

In the context of natural language processing, how are RNNs typically utilized for machine translation?

- For image classification
- For clustering text data
- As a replacement for CNNs
- As discriminators in GANs
- Encoding the input sequence and decoding the output sequence ✔

The correct answer is: Encoding the input sequence and decoding the output sequence

Question 4

1.00/1.00

What is the key advantage of using LSTMs over basic RNNs in sequence generation tasks?

- Simpler architecture
- Faster training speeds
- Lower computational cost
- Ability to remember long-term dependencies✔
- Less prone to overfitting

The correct answer is: Ability to remember long-term dependencies

Question 5

1.00/1.00

When using RNNs for music generation, what does each neuron in the output layer typically represent?

- A specific instrument
- A frequency band
- A time step in the generated sequence
- A note in the C major scale
- A possible note or rest in the musical vocabulary✔

The correct answer is: A possible note or rest in the musical vocabulary

Question 6

1.00/1.00

Which problem in RNNs does LSTM help to address?

- Bias
- High variance
- Overfitting
- Vanishing gradient✔
- All of the options given

The correct answer is: Vanishing gradient

Question 7

1.00/1.00

Which of the following is NOT a type of RNN architecture?

- Simple RNN
- Bidirectional RNN
- LSTM
- GRU
- CNN✔

The correct answer is: CNN

Question 8

1.00/1.00

RNNs are primarily used for which type of data?

- Tabular
- Image
- Audio
- None of the options given
- Sequential✔

The correct answer is: Sequential

Question 9

1.00/1.00

During the training of RNNs for sequence generation, what is the common technique used to mitigate the vanishing gradient problem?

- L1 regularization
- Data augmentation
- Batch normalization
- Dropout
- Gradient clipping✔

The correct answer is: Gradient clipping

Question 10

1.00/1.00

Which RNN architecture utilizes update and reset gates to manage memory?

- GRU✔
- Echo State Network
- Hopfield Network
- Bidirectional RNN
- LSTM

The correct answer is: GRU