

1. What is the primary function of the hidden state in Recurrent Neural Networks (RNNs)?

- A. To generate random outputs
- B. To carry information from previous time steps**
- C. To store static input data
- D. To eliminate the need for backpropagation

2. Which of the following tasks is NOT typically associated with sequence modeling?

- A. Image recognition**
- B. Language translation
- C. Sentiment classification
- D. Text generation

3. What is a significant challenge faced during the training of RNNs?

- A. Lack of available training data
- B. Vanishing and exploding gradients**
- C. Overfitting due to excessive data
- D. Inability to process sequential data

4. What is the primary limitation of sequential processing in neural networks?

- A. It limits parallelization and efficiency**
- B. It cannot handle large datasets
- C. It is too complex to implement
- D. It requires more computational resources

5. In the context of the attention mechanism, what do 'keys' represent?

- A. The desired output of the model
- B. Descriptors of data elements**
- C. The final predictions made by the model
- D. The input sequence itself