

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