MCQ report

Q1: What was the main problem with earlier encoder-decoder models that the attention mechanism was introduced to solve?

Choices: a:The difficulty in finding content for obscure languages.|b:The vanishing gradient problem in simple RNNs.|c:The fixed-length vector bottleneck for encoding long sentences.|d:The high memory requirements of neural networks.

Correct Answer: c

Q2: In advanced Neural Machine Translation models, units like Gated Recurrent Units (GRUs) or Long Short-Term Memory (LSTM) units are commonly employed in the encoder and decoder. What key advantage do these units provide over simple Recurrent Neural Networks in handling sequential data?

Choices: a:They eliminate the need for an attention mechanism.|b:They are inherently faster to train on large datasets.|c:They effectively mitigate vanishing/exploding gradients and capture long-range dependencies.|d:They require significantly less computational memory.

Correct Answer: c

Q3: When comparing the performance of a new Neural Machine Translation model to a previous state-of-the-art model (e.g., Bahdanau et al. 2014) using the BLEU score, what would a result indicating 'quite close' scores (e.g., 25.76 vs 26.75) suggest about the new model's performance relative to the baseline?

Choices: a:The new model significantly outperforms the baseline.|b:The new model performs comparably to the baseline, without a clear substantial improvement or degradation.|c:The new model is fundamentally flawed and performs poorly.|d:The BLEU score is not a suitable metric for this comparison.

Correct Answer: b