

## Reference – Shown-as-Correct Answers

### Q1

Answer presented as correct: A) Mapping textual phrases to image regions■(

*Reason: Involves determining the spatial relationships between textual descriptions and visual elements within an image.*

### Q2

Answer presented as correct: D) Reinforcement learning

*Reason: Utilizes a trial-and-error approach to maximize expected cumulative rewards for choosing optimal actions.*

### Q3

Answer presented as correct: A) Concatenating visual patches and word tokens into a single Transformer stream■(

*Reason: Efficiently integrates different modalities with improved model interpretability.*

### Q4

Answer presented as correct: B) A CNN classification head■(

*Reason: Responsible for identifying features in images that aid in caption creation.*

### Q5

Answer presented as correct: B) Table normalization■(

*Reason: Essential for maintaining diverse data representations across different modalities for accurate analysis.*

### Q6

Answer presented as correct: B) Using retrieval-based pipelining■(

*Reason: Enhances result accuracy by streamlining the sequence of information retrieval steps.*

### Q7

Answer presented as correct: B) FID■(

*Reason: An important metric for assessing image quality representation in image captioning tasks and evaluations.*