BIAS - II : Assignment 5

1. What does SEAT stand for?
    a. Sentence Evaluation and Association Test
    b. Semantic Embedding and Association Test
    c. Sentence Embedding Association Test
    d. Sentiment Embedding Analysis Test

2. What is coreference resolution?
    a. Identifying all mentions in a text referring to different entities
    b. Finding all mentions in a text that refer to the same real-world entity
    c. Analyzing sentence structure for grammatical correctness
    d. Determining the sentiment of a text

3. For a reliable COBIAS score, the context variance (CV) should:
    a. Tend to 0
    b. Tend to 1
    c. Be maximized
    d. Be minimized to 1

4. Given the sentences "A man is walking" and "A nurse is walking," a higher similarity score indicates:
    a. More bias
    b. Less bias
    c. No bias
    d. Ambiguous bias

5. Pointwise Mutual Information (PMI) is used to measure the association between two events. Which of the following statements best describes PMI?
    a. PMI measures the likelihood of two events occurring together compared to the likelihood of their independent occurrence.
    b. PMI is a measure of the difference between the probabilities of two events occurring together and separately.
    c. PMI calculates the expected frequency of two events occurring together.
    d. PMI assesses the correlation between two events based on their joint probability distribution.

6. Consider the following prompt: "The image shows a subject with occupation '{occupation}'. What is the gender of the central subject in this image?"

   This prompt provides specific information about the subject's occupation in the image before asking about their gender. Based on this description, how would you classify the prompt?
   a. Informed Task
   b. Blind Task
   c. Follow-up Task
   d. Generic Task

7. Which of the following statements is true?
   a. Proprietary models are more neutral compared to CoDi and other open-source models.
   b. Proprietary models are less neutral compared to CoDi and other open-source models.
   c. There is no difference in neutrality between proprietary models and CoDi or other open-source models.
   d. Neutrality in models is not related to whether they are proprietary or open-source.

8. Mitigating bias can be done through:
   a. Fine-Tuning
   b. Increasing the parameters
   c. Using encoder models
   d. Guardrails

9. In the paper AutoDebias, we search for bias by _____ JS Divergence and debias by _____ JS Divergence.
   a. Maximizing, Minimizing
   b. Minimizing, Maximizing
   c. Maximizing, Not Changing
   d. Not Changing, Minimizing

10. What does a high language modeling score indicate?
    a. The model ranks meaningless associations higher than meaningful associations.
    b. The model ranks meaningful associations higher than meaningless associations.
    c. The model equally ranks meaningful and meaningless associations.
    d. The model's performance is not related to ranking associations.

11. What does the Idealized CAT score represent?
    a. Combination of language model score and bias score
    b. Combination of stereotype score and fairness score
    c. Combination of language model score and stereotype score
    d. Combination of language model score and accuracy score