#### train\_prompt1\_bin (sf\_train\_binary):

- "This is a climate-misinformation classification task. Your task is that of telling whether the given text presents a contrarian claim regarding climate change. Your reply should be: 1: incorrect/inaccurate/flawed reasoning or 5: accurate/correct. Your reply should contain only the corresponding number and nothing else (i.e., 1 or 5). Terminate your response after including the number. The claim is: {claim} ANSWER: {label}"
  - Baseline:
  - o Finetuned:

### test\_prompt1\_bin (sf\_test\_binary):

"This is a climate-misinformation classification task. Your task is that of telling whether
the given text presents a contrarian claim regarding climate change. Your reply should
be: 1: incorrect/inaccurate/flawed reasoning or 5: accurate/correct. Your reply should
contain only the corresponding number and nothing else (i.e., 1 or 5). Terminate your
response after including the number. The claim is: {claim} ANSWER: "

# train\_prompt1\_multi (sf\_train):

• "This is a climate-misinformation classification task. Your task is that of telling whether the given text presents a contrarian claim regarding climate change. Your reply should be: 1: incorrect/inaccurate/flawed reasoning, 2: unsupported/misleading, 3: lacks context/imprecise/partially correct, 4: mostly accurate/mostly correct, or 5: accurate/correct. Your reply should contain only the corresponding number and nothing else (i.e., 1, 2, 3, 4, or 5). Terminate your response after including the number. The claim is: {claim} ANSWER: {label}"

#### test\_prompt1\_multi (sf\_test):

• "This is a climate-misinformation classification task. Your task is that of telling whether the given text presents a contrarian claim regarding climate change. Your reply should be: 1: incorrect/inaccurate/flawed reasoning, 2: unsupported/misleading, 3: lacks context/imprecise/partially correct, 4: mostly accurate/mostly correct, or 5: accurate/correct. Your reply should contain only the corresponding number and nothing else (i.e., 1, 2, 3, 4, or 5). Terminate your response after including the number. The claim is: {claim} ANSWER: "

# train\_prompt2\_bin (sf\_train\_prompt2\_binary):

• "This is a climate-misinformation classification task. Your task is that of telling whether the given text presents a contrarian claim regarding climate change. Your reply should be: 1: incorrect/inaccurate/flawed reasoning (A claim is labeled "1" when it is clearly wrong—for instance, if it makes a statement of fact in direct contradiction with available data, or if it provides an explanation or a theory whose predictions have been invalidated.) 5: accurate/correct (If the claim is a statement of fact, it is labeled as "5" when it describes an observation in a way that is consistent with available data and does not leave out any relevant element of context. If the claim is an explanation of the causes of an observation (aka a "theory" or a "hypothesis" in science), it is labeled as "5" when it has been well-tested in scientific studies and generates expected observations that are confirmed by actual observations.) Your reply should contain only the corresponding number and nothing else (i.e., 1 or 5). Do not repeat your answer or have

"us" in your response, and terminate your response after including the number. The claim is: {claim} ANSWER: {label}"

train\_prompt2\_bin (sf\_test\_prompt2\_binary):

"This is a climate-misinformation classification task. Your task is that of telling whether the given text presents a contrarian claim regarding climate change. Your reply should be: 1: incorrect/inaccurate/flawed reasoning (A claim is labeled "1" when it is clearly wrong—for instance, if it makes a statement of fact in direct contradiction with available data, or if it provides an explanation or a theory whose predictions have been invalidated.) 5: accurate/correct (If the claim is a statement of fact, it is labeled as "5" when it describes an observation in a way that is consistent with available data and does not leave out any relevant element of context. If the claim is an explanation of the causes of an observation (aka a "theory" or a "hypothesis" in science), it is labeled as "5" when it has been well-tested in scientific studies and generates expected observations that are confirmed by actual observations.) Your reply should contain only the corresponding number and nothing else (i.e., 1 or 5). Do not repeat your answer or have "us" in your response, and terminate your response after including the number. The claim is: {claim} ANSWER: "