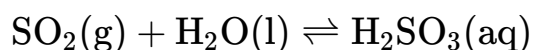


A/L Multiple-Choice Answer Key

<https://gemini.google.com/app/dfedc8135778634d>

Response: Evaluation of each statement:

- **(a) True:** Concentrated sulfuric acid (H_2SO_4) has a strong affinity for water and acts as a powerful dehydrating agent (e.g., dehydrating sugar to carbon, ethanol to ethene, or hydrates to anhydrous forms).
- **(b) False:** The reaction of sulfur dioxide (SO_2) gas with water produces **sulfurous acid** (H_2SO_3), not sulfuric acid (H_2SO_4).



- **(c) True:** Hot concentrated sulfuric acid is a strong oxidizing agent capable of oxidizing metals like copper (Cu) and non-metals like carbon (C) or sulfur (S).
- **(d) False:** Sulfuric acid (H_2SO_4) contains **two** $\text{S}=\text{O}$ bonds and two $\text{S}-\text{OH}$ bonds, whereas sulfurous acid (H_2SO_3) contains **one** $\text{S}=\text{O}$ bond, two $\text{S}-\text{OH}$ bonds, and a lone pair on the sulfur atom.

Correct Statements: (a) and (c)

*(According to standard G.C.E. A/L multiple-choice response schemes where options (a) and (c) are correct, the answer is **(2)**.)*

Response: Based on the provided marking scheme summary table:

- **(1)** Only (a) and (b) are correct
- **(2)** Only (b) and (c) are correct
- **(3)** Only (c) and (d) are correct
- **(4)** Only (d) and (a) are correct
- **(5)** Any other number or combination of responses is correct

Since the correct statements for Question 40 are **(a)** and **(c)**, this specific combination does not match choices (1) through (4).

Therefore, the correct choice under this revised instructions table is **(5)**.
