It was evident that many candidates were not well prepared for the question paper, although some individuals performed well. Certain sections in the paper were particularly poorly answered. Candidates must be encouraged to study the entire syllabus.

TOPICS

* BOYLE'S LAW
  The formulation of Boyle's Law was problematic for many candidates as they omitted to mention that this law is applicable only to a given mass of gas. Many candidates did not convert degrees C to degrees K in the calculation at 2.2.1.

* INTERMOLECULAR FORCES
  Questions relating to this section were answered poorly as many candidates could not identify the forces or bonds applicable in the solids. This is significant, since the understanding of chemical formulae and chemical equations, as well as chemical (ionic) charges, rests on a sound knowledge and understanding of chemical bonding.

* PREPARATION OF H_2S
  The question on the preparation of H_2S was not answered well. This could indicate that the preparation reaction is not demonstrated in the classroom, which could explain why candidates did not know why a fume cupboard is needed in the experiment or could not describe what is observed. Teachers should ensure that, when conducting chemistry experiments, pupils know what to observe and that they can explain it adequately.

* FOUNTAIN EXPERIMENT (SOLUBILITY OF SO_2)
  The question required candidates to explain and apply their knowledge. It was evident that this presented problems to many candidates. They were unsure when to use the double arrow or single arrows in chemical equations – a trend that could be picked up throughout the paper.

* APPLICATION OF LE CHATELIER'S PRINCIPLE
  Very few candidates were able to answer Question 5.2 correctly. This question required the explaining and applying of scientific knowledge and principles. The majority of candidates merely formulated Le Chatelier's Principle, without reference to the specifics in the question.

? REACTION RATES
  Very few candidates were able to answer Question 6. This question also required the explaining and applying of scientific knowledge and principles. Teachers need to ensure that candidates can apply scientific knowledge to a whole range of scenarios and contexts.

* TITRATION
  Candidates faired reasonably well in the questions relating to this section. A significant number of candidates experienced difficulties with the substitutions, or used the wrong formula. Manipulations of chemical formulae should not be done before substitutions are attempted.

* ELECTROCHEMICAL CELLS
  Candidates fared reasonably well in the questions relating to this section. However, some were unsure about when to use the double arrows or single arrow in chemical equations.

* ORGANIC CHEMISTRY
  The section on organic chemistry was not answered well. Candidates did not know the difference between structural formulae and molecular formulae. Clearly not enough time is spent on this section, as many candidates were unable to answer basic questions on nomenclature and functional groups.