

CHEMISTRY

SUBJECT 9189

PAPER 6

GENERAL COMMENTS

Generally, the paper proved to be difficult to candidates especially those who had not had enough practice at their centres.

- 1 (a) Most candidates failed to state the colour of the residue (which was expected to be an off white / cream residue). A majority of candidates referred to the residue as a precipitate yet the sample FBI was a solid from the beginning. Of notable concern was the filtrate which most candidates referred to as “clear” instead of “colourless” filtrate.
 - (b) Most candidates managed to answer this part correctly though the use of “and” instead of “or” was noted. This resulted in candidates being penalized on the deduction of the anions.
 - (c) Incorrect observations: a “white” ppt was observed instead of the “cream” or “off-white” ppt. This resulted in deduction of chloride anion instead of the bromide ion. It is important for teachers to give candidates enough practice to distinguish between “white” and “cream”.
 - (d) The majority of candidates did not answer this part correctly. They described the solution as “yellow” instead of “orange/brick-red/brown”.
 - (e) Most candidates managed to get the first part correct though they failed to give a confirmatory test for the gas produced.
 - (i) A majority of candidates failed to observe the “off-white ppt” formed as a result of addition of $\text{NaOH}_{(\text{aq})}$ and rushed to give the observation of “brown ppt” produced when FB3 was allowed to stand for a few minutes. This resulted in them deducing Fe^{3+} instead of ndn^{2+} . Teachers should encourage candidates to add reagents gradually and make observations at each stage.
 - (ii) The majority of candidates gave the observation “solid dissolves” instead of stating that the “ppt dissolved”. The purpose of adding NH_4Cl_5 was to make the ppt dissolve. Careless candidates deduced $\text{NH}_3(\text{g})$ which was used as one of the reagents.
- 2 (a) Careless candidates failed to record time to the nearest second as required by the question though these were the minority. A majority of candidates failed to record I/t to 3 significant figures as required by the question. Candidates were assessed on the

consistence of their results with the majority scoring above half on accuracy of the experiments.

- (b) The order of reaction was supposed to be consistent with the results resulted and majority of candidates were found wanting.