Guidance on Iodine Clock online practical write-up

You should complete sections A to E in *no more than* 1500 words. If you have carried out additional experiments, you can include an extra section of up to 500 words *or* extend your report by up to 500 words to a total length of up to 2000 words.

You should complete your report in the following sections.

A. Abstract (5%)

This should give a short overview of the whole practical including your conclusions.

B. Introduction (5%)

A brief explanation of the background to the experiments and what your objectives were. You should cite sources to support what you say. It would be good to include a hypothesis.

C. Materials and methods (30%)

You should write a protocol, written in correct scientific style and with reference to principles of experimental design as discussed in lectures and tutorials. Please explain the reasons for decisions you took about how to take measurements. Include things that you would do in the laboratory to ensure that your data are precise, accurate, controlled and reliable. Refer to research papers to see the style in which you should write this section and the rest of your report.

D. Results (15%)

You should explain, present and analyse your data. You must include text to explain the data and suggest what the reader should note. Again, try to imitate the style of Results sections in research papers.

E. Discussion (10%)

An evaluation of what your results show including an awareness of any limitations in your design. A good discussion relates the data you have reported to what other researchers have found. You may wish to suggest ways to develop upon your investigation.

F. Marks allocated for closeness of recorded times to your targets (20%)

Your group will be given two "target times" in the first Experimental Design tutorial. Up to 20% (10% for each time) will be allocated based upon how close these times are to your two target times.

If you are able to use your experimental design in the laboratory, you should ask one of the lecturers or PhD students supervising the practical to record your

time when you believe that you have identified suitable conditions. You can ask them to measure a single time or to use the mean of up to three replicates (this must be specified before the first measurement).

Quality of written style, organisation, and presentation, quality of reference sources selected and correct citation of those references, evidence of reading beyond taught material and academic integrity.- 15% (G).

Optional (for bonus mark up to 20%)

You can also include experiments to test an additional hypothesis using this type of clock reaction, together with the procedures that you used and what you found. This can be written as a separate section (again, in the style of a published research paper) or included in the main report.