Part II and Part III Examinations May/June 2018
Format of the Questions and Procedure for Setting

Putting together these examinations is a complex, time consuming task. It will help me very much if you would please read and follow these guidelines closely as you prepare your questions. There are significant changes for this year, so please read these instructions carefully.

1. Number and style of questions required: Part II
For each of courses A1–A4 two 30 minute questions are required, along with four 5 minute questions for each of the courses A1–A4. For course A6 four 30 minute questions are required along with eight 5 minute questions.
For each B or C course of 12 lectures two 45 minute questions are required; for a course of 6 lectures one 45 minute question is required.
The 45 minute questions will be marked out of 25, the 30 minute questions will be marked out of 20, and the 5 minute questions out of 5.

2. Number and style of questions required: Part III
For each Part III course three questions are needed: one 30 minute question for Paper 1 and two 45 minute questions for Paper 2 or 3. For course IDP1 three 45 minute questions are needed. In the past the Examiners have felt that many of the 30 minute questions are rather too long – so please consider carefully what a student can reasonably be expected to do in the allotted time. Remember that they need to have time to both think and write.
The 45 minute questions will be marked out of 25, the 30 minute questions will be marked out of 20.

3. Format of questions; indication of part marks
Each question should be divided into parts (a), (b), (c), and if necessary parts can be further subdivided into (i), (ii), (iii). For each part the approximate number of marks should be indicated by a figure in square brackets, placed to the far right, after the text of that part of the question. For example
(a) Do this synthesis [5]
(b) (i) Prove this [2]
   (ii) Calculate this [3]

4. Guidelines for setting questions
Please pay careful attention to the following guidelines from the Teaching Committee.
• When devising an examination question, it is important to ensure that the question is appropriate to the course to which it relates. Appropriate means that the question is at the right level and of the right length, and that it reflects the spirit of the course rather than, for example, picking on some minor topic or obscure side issue. In addition, it is desirable that, as far as is possible, a question requires the candidate to use ideas and concepts from the whole course to which it relates.
• Unless a question setter is very familiar with the content and scope of the course (for example as a result of lecturing or supervising the course) it is essential that the lecturer(s) be consulted as part of the question setting process. A preliminary discussion with the lecturer, prior to setting any questions, would be appropriate, as well as further consultation as the questions are refined.
• Once the question is set, a complete written-out model answer must be prepared. Experience shows this a very good way of finding errors and unforeseen difficulties.
- A second person (the ‘checker’) must then attempt the question and produce a written-out answer; it is vital that this is done without reference to the model answer.
- The question setter and checker then compare notes, and the setter revises the question as appropriate.
- The model answer is revised if necessary, and an indicative marking scheme is prepared.

5. Model answers
Each question must be accompanied by a model answer; some indication of how the marks will be allocated should be included in the model answer. The External Examiners are most insistent that model answers be provided. **Where the answer is expected to take the form of a short essay, the model answer needs to be sufficiently detailed that the External Examiner can judge what is required.** In previous years the Externals have been very critical of the lack of proper model answers for essay questions, so we must insist on them.

Even when part of an answer is a standard derivation, please write out what is expected. In the past External Examiners objected to the phrase ‘book work’ as a model answer on the grounds that they could not judge the length and depth of the expected answer.

We also ask you to give an indication of the relatively difficulty of each part of the question. This is most conveniently done using the rating system indicated on the **cover sheet** to be submitted with the question.

The model answer must be legible. Ideally, it should be typed, but if this cannot be done than please ensure that your handwriting is clear. As we need to copy the answers please make sure that you write in **black ink**, on **plain A4 paper** and on **one side of the paper** only. It is very difficult to copy answers written in pale pen or pencil, or on coloured or lined paper, or double sided. Please do not include copies of published papers as part of your model answers.

In recent years the External Examiners have been increasingly critical over the illegibility of some of the model answers. **Please make sure that what is provided is readable and can be copied easily.**

6. Submission of Questions
Word and ChemDraw templates, along with these instructions and cover sheets can be downloaded from [http://www.ch.cam.ac.uk/teaching/materials-examiners](http://www.ch.cam.ac.uk/teaching/materials-examiners) **Please use the templates**. LATEX documents are also welcome – there is no need to use any particular format.

Although you may wish to paste any pictures (including ChemDraw) directly into your documents, **it is vital that you also supply the original graphics files**. The reason for this is that it may be necessary to modify the original diagrams, and such modifications are impossible without the original file. Remember that the examination papers are not printed in colour, so either send in B&W pictures or check that any colour pictures are still clear when printed in B&W.

Please submit a print out along with your files – it is useful for me to have a ‘master’ to refer to, just in case formatting etc. gets lost.

7. Cover sheet
Each question you submit should be accompanied by a cover sheet (as supplied), which you are asked to fill in fully.

Many thanks for your cooperation.

**James Keeler**
Senior Examiner