

Honour Moderations in Computer Science and Mathematics and Computer Science

First Public Examination 2007

Notice to Candidates

Purpose of this notice

Full particulars of the examinations are given in the *Examination Regulations* 2006, and Examination Conventions for 2007 can be found at

<http://web.comlab.ox.ac.uk/internal/courses/conventions/>.

This notice is confined to matters which may need emphasis or amplification.

Conduct of the examination

Candidates will be required to produce their University cards at the start of each examination session.

The marking of the examination – including practical work – is conducted as far as possible in ignorance of the candidates' names and colleges. To this end the following points are to be observed:

Scripts: Every candidate will be provided with an *examination number*, and all work handed in must be attached to a cover sheet marked with that number. *Even if the candidate submits no written work for an examination which he or she attends, a cover sheet should be submitted.*

Neither the name nor the college of the candidate should appear anywhere on the script.

Practicals: Each separate report of practical work should be conspicuously labelled *with the candidate's examination number only*, and not with the candidate's name or college.¹

See also the section on "Practical work".

The following points should also be noted:

Rough work: Special paper will be provided. Candidates should not bring their own.

Legibility: Illegible scripts, if they are to be considered by the examiners, will be typed *at the candidate's expense*.

Handing in: Each candidate is responsible for handing in his or her scripts, appropriately bundled according to the instructions (if any) on the examination paper. Each bundle must have a completed cover sheet, and candidates should hand in an empty cover sheet for those sections of a paper from which they attempt no questions.

Timetable

Candidates will receive a copy of the detailed timetable from the Clerk of Schools in due course.

The Examiners will also make the timetable available via the Computing Laboratory website.

¹ This regulation is designed to protect the anonymity of candidates in the interests of fairness, but the examiners do not intend to seek to penalize candidates who inadvertently break this rule when handing in practicals.

Composition of Papers

The examination will consist of four papers, each of three hours' duration. Candidates taking Honour Moderations in Computer Science will take the papers

- CS1 Functional Programming, Data Structures and Algorithms
- CS2 Procedural Programming, and Digital Hardware
- CS3 Mathematics for Computer Science
- M1(CS) Mathematics I

Candidates taking Honour Moderations in Mathematics and Computer Science will take the papers

- CS1 Functional Programming, Data Structures and Algorithms
- CS2 Procedural Programming, and Digital Hardware
- M1 Mathematics I
- M2 Mathematics II

Papers CS1 and CS2 will each contain eight questions, four questions on each part. Paper CS3 will contain nine questions, three questions on each part. Papers M1, M1(CS) and M2 will each contain eight questions; they will be made up as follows:

Paper M1	Calculus, Sets and Groups, and Linear Algebra
Paper M1(CS)	Calculus and Linear Algebra
Paper M2	Analysis and Geometry.

Each question is worth 20 marks. On each paper, candidates are permitted to answer at most five questions.

On papers CS1, CS2 and CS3, each question will contain parts of a straightforward nature, and parts requiring more advanced understanding or an unseen application of techniques or theory on the syllabus; the examination paper will give the marks available for each part.

On papers M1, M1(CS) and M2, each question is divided into two or three parts. The marks for each part will be given on the examination paper.

A candidate may achieve a mid-range second class performance on the examination by complete answers to the straightforward parts of five questions on each paper.

The practicals for all courses will be assessed as a nominal fifth paper. See section on 'Practical work' for further details.

Practical work

Handing in Practical Reports: Candidates must hand these reports in to the Computing Laboratory by **noon on Monday of week 5 of Trinity Term**. Details of the hand-in procedure will be sent to you in week 1 of Trinity Term.

Presentation of Practical Work: The practical work must be bound together in a single file (or packed in a single envelope) addressed to the Chairman of Examiners in Computer Science (or Mathematics and Computer Science as the case may be) and must be marked clearly on the outside with the candidate's name, examination number, and the Honour Moderations in which the candidate is being examined (either Computer Science, or Mathematics and Computer Science). The bundle must include the sheet labelled "student's record of practical work" for all the practicals it contains; we will forward this sheet to you in week 1 of Trinity Term.

Assessment of Practical Work: The practicals for all the courses will be assessed as a nominal fifth paper, which will be marked on a fail/pass/distinction scale. Practical do not contribute to the classification of candidates but each candidate must pass the practical course in order to pass the examination.

The examiners will determine a mark for the practical work associated with each computation paper - taking into account the provisional mark assigned by the demonstrator and their own assessment of the work submitted.

The detailed procedure for assessing practical work is set out in the Examination Conventions but, broadly speaking, a candidate will pass the practical course if they have completed adequately (at Grade S) slightly more than half the practical work for the papers they are taking.

In order to achieve a distinction, students will have to have completed most of the more challenging parts of each practical and submitted a clear and well-argued report.

Late submission or failure to submit coursework

Under the provisions permitted by the 2006 regulation, late submission of coursework (i.e. practical reports) will normally result in the following penalties:

Where permission for late submission has been granted by the Proctors (under clause (1) of para. 16.8, page 45), no penalty will be imposed.

Where permission for late submission has not been granted by the Proctors, but the Proctors have given leave for the candidate to remain in the exam (under clauses (3) and (4) of para 16.8), the Examiners may impose a penalty not exceeding the credit available for that piece of work. The Examiners should take into account such factors as:

1. the evidence forwarded to them by the Proctors and (insofar as the following matters are not dealt with by such evidence);
2. a judgement concerning the degree of advantage gained by the extra time made available to the candidate relative to the time that was available to complete coursework by the original deadline;
3. the weight to be attached to the reason given, if any, for late submission.

Where the candidate is not permitted by the Proctors to remain in the examination he or she will be deemed to have failed the examination as a whole.

Medical certificates

If evidence of recent medical problems is presented to the examiners via the Proctors, they will take this into account in the classification process.

Examiners' evaluation criteria

Marks will be reported to tutors in standardised form, called University Standardised Marks (USMs). These are marks in the range 0-100 for each paper, with the overall classification being determined according to the rules given in the section below. The examiners will determine, for each paper, where the borderline between a first class and a second class performance on that paper should lie, and similarly for the other borderlines. The marks will then be scaled so as to produce the appropriate mapping into USMs. Some of these scalings may be adjusted after examiners look at the overall pattern of performances by candidates. Different papers may be scaled in different ways so as to compensate for differences in difficulty, so that each USM reflects each candidate's performance on that paper.

Classification of examination performance

The classification will be based upon the Average USM (AvUSM) (rounded up to a whole number) as follows:

First Class:	$\text{AvUSM} \geq 70$;
Second Class:	$70 > \text{AvUSM} \geq 50$;
Third Class:	$50 > \text{AvUSM} \geq 40$;
Pass:	$40 > \text{AvUSM} \geq 30$;
Fail:	$30 > \text{AvUSM}$.

A candidate who fails the practical paper will fail Honour Moderations as a whole. Otherwise, the practical paper plays no part in determining classification.

Results

The examiners hope to be able to post the pass list by Monday 9th July 2007. Details of individual marks will be communicated to tutors.

Prelims

A Preliminary Examination (Prelim) is set for candidates who fail Moderations or are unable to sit Moderations; candidates enter for Prelims through their colleges and with the permission of their college. The Preliminary Examination consists of two papers:

- In Computer Science, Paper I is on the topics for papers CS1 and CS2 of Honour Moderations, and Paper II is on the topics for papers CS3 and M1(CS).
- In Mathematics and Computer Science, Paper I is on the topics for papers CS1 and CS2 of Honour Moderations, and Paper II is on the topics for papers M1 and M2.

There is no practical part to the Prelims examination. Each paper will be of three hours' duration. All questions set will be of an elementary and straightforward nature.

Difficulties

Any candidate who encounters difficulties with any of the above should discuss the matter with his or her tutor without delay.

B.A.Sufrin
Chairman of Moderators
Honour Moderations in Computer Science
and Mathematics & Computer Science
(Trinity Term 2007)

**Honour Moderations in Computer Science
and Mathematics and Computer Science**

First Public Examination 2007

Practicals declaration form

This form is to be handed in with practicals. The form must be signed.

I declare that the reports on practicals that I have handed in are all my own work except for marks and comments by demonstrators, and other material clearly indicated.

Name:

College:

Candidate number:

Honour Moderations:

Signature:

Date: