

Final Honour Schools of Computer Science and Mathematics and Computer Science

Part B Examination 2007

Notice to Candidates

Purpose of this notice

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

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

This notice is confined to matters that may need emphasis or amplification. It is addressed only to candidates in the Honour Schools of Computer Science and of Mathematics & Computer Science. If you are taking papers from other schools (for example Mathematics or ECS) then you should refer for information to notices circulated by the chairmen of examiners in those schools.

Candidates' attention is specifically drawn to the material in this notice concerning the handing in of Practical Work and Project Reports, and to the Examiners' evaluation criteria and University Standardised Marks.

The marking and classification scheme for finals is described in the Examination Conventions.

Independence of Examiners

It must be stressed that to preserve the independence of examiners, candidates are not allowed to make contact directly about matters relating to the content or marking of papers. Any communication must be via the Senior Tutor of the candidate's college, who will contact the Proctors if appropriate. The Proctors will in turn communicate with the Chairman of Examiners.

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 The sheet 'Student's record of practical work' should, however, be filled in with the details requested; it will be separated from the practical reports before they are marked. See also the section on "Practical work".

Calculators: The Regulations (pp. 204, 347) state that "The use of calculators is generally not permitted but certain kinds may be allowed for certain papers. Specifications of which papers and which types of calculators are permitted for those exceptional papers will be announced by the examiners in the Hilary Term preceding the examination."

¹ This regulation is designed for your own protection. However, it is not the policy of the examiners to penalise candidates who inadvertently break this rule when handing in practicals and projects.

The only papers for which calculators will be allowed are Intelligent Systems I and II. **For these papers only** candidates may bring into the examination room one calculator from the list of types that follows. CASIO fx-82, fx-83 (any model), fx-85 (any model), fx-992S; SHARP EL-520, EL-530LB, EL-531 (any model), or any calculator that is permitted for papers set in the Honour School of Engineering Science.

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

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

The detailed timetable for the Examination has yet to be finalised by the Clerk of Schools. Candidates will receive a copy of this from the Clerk of Schools in due course. The Examiners will also make the timetable available via the Computing Laboratory website.

Composition of papers

The details below are confined to Part B; similar details for papers under the control of other schools should be sought from those schools.

| Paper | Number of questions | Maximum number of questions to be answered | Marks per question | Duration of exam |
|-------------------------------------------------|---------------------|--------------------------------------------|--------------------|------------------|
| PART B1 | | | | |
| Formal Program Design I | 3 | 2 | 25 | 1.5 hours |
| Formal Program Design II | 3 | 2 | 25 | 1.5 hours |
| Compilers | 3 | 2 | 25 | 1.5 hours |
| Programming Languages | 3 | 2 | 25 | 1.5 hours |
| Computer Architecture | 3 | 2 | 25 | 1.5 hours |
| Computer Graphics | 3 | 2 | 25 | 1.5 hours |
| Numerical Analysis | 3 | 2 | 25 | 1.5 hours |
| Advanced Data Structures & Algorithms | 3 | 2 | 25 | 1.5 hours |
| PART B2 | | | | |
| Intelligent Systems I | 3 | 2 | 25 | 1.5 hours |
| Intelligent Systems II | 3 | 2 | 25 | 1.5 hours |
| Databases | 3 | 2 | 25 | 1.5 hours |
| Computer Security | 3 | 2 | 25 | 1.5 hours |
| Object Oriented Design | 3 | 2 | 25 | 1.5 hours |
| Integer Programming | 3 | 2 | 25 | 1.5 hours |
| Computational Complexity | 3 | 2 | 25 | 1.5 hours |
| Lambda Calculus & Types | 3 | 2 | 25 | 1.5 hours |
| Logic of Multi-Agent Information Flow | 3 | 2 | 25 | 1.5 hours |
| Numerical Solution of Differential Equations I | 3 | 2 | 25 | 1.5 hours |
| Numerical Solution of Differential Equations II | 3 | 2 | 25 | 1.5 hours |

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| PART B4 | | | | |
| Automata, Logic and Games | 3 | 2 | 25 | 1.5 hours |
| Categories, Proofs and Programs | 3 | 2 | 25 | 1.5 hours |
| Domain Theory | 3 | 2 | 25 | 1.5 hours |
| Quantum Computer Science (MCS only) | 3 | 2 | 25 | 1.5 hours |

On all Computer Science papers there will be an indication of how many marks out of the total of 25 are allocated to each part of each question. This is intended as a guide to candidates in allotting time and effort.

Where a candidate offers two option papers that are timetabled in a single three-hour session, he or she may work on both papers for the full three hours, but may answer at most 2 questions from each paper.

The Examiners advise candidates that it is best to answer complete questions whenever possible, and this will be reflected in the mark scheme for each question.

Practical work

Handing in Practical Reports:

Please note that there is a change in procedure since last year. Candidates must hand these reports in to the Chair of Examiners **at 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 due course.

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 School in which the candidate is being examined (either Computer Science, or Mathematics and Computer Science).

The bundle must include the sheet, 'Student's record of practical work', for all the practicals it contains; this sheet will be forwarded to you at the beginning of Trinity Term. The declaration form included with this notice must be handed in as well: on it the candidate declares the work to be his or her own.

Assessment of Practical Work: 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.

Practicals do not contribute to the classification of candidates but each candidate must pass the practical course in order to pass the examination.

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 have chosen.

Project work – Computer Science candidates only

The Form of a Project Report: Computer Science candidates should consult page 205 of the Examination Regulations for directions on the form of the report. An example outline of a project report can be found in the Undergraduate Course Handbook at

<http://web.comlab.ox.ac.uk/oucl/courses/undergrad06-07/handbook/section6.html>.

However, the examiners will accept a report up to 10,000 words in length plus forty pages of additional material (e.g. diagrams, program text).

Each project topic must have been approved by the Teaching Committee of the Computing Laboratory.

Software demonstrations: For projects that involve the production of software, supervisors will be asked to report whether or not they have seen the software working as intended. It is up to the supervisor and

candidate to decide what form the demonstration of the program might take, and to ensure that time is set aside for a demonstration of the final outcome of the project.

Handing in Project Reports: Candidates must hand in two copies of their project by noon on Monday of 5th week of Trinity Term. The project should be handed in as a separate item from any practical reports. Please note that candidates should include their name, but not their candidate number, on the project report.

Late submission or failure to submit coursework

Under the provisions permitted by the 2006 regulation, late submission of coursework (i.e. practical and project 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, with the proviso that for candidates for Part B in 2007 the penalty shall not exceed that stated in the 2005 Regulations. 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. The examiners in Part A may adjust the marks of a candidate in some papers in the light of this evidence, but will in any case pass on the evidence to the Part B examiners in the following year. The examiners in Part B will consider evidence relating to a candidate's performance both in Part A and in Part B. They also may adjust the marks for certain papers, and may in addition deviate in a candidate's favour from the usual relationship between average marks and degree classes, particularly when there is medical evidence relating to Part A, and the candidate's performance in Part B is markedly improved.

Results

The examiners hope to be able to post the class list by Wednesday of 10th week of Trinity Term. Details of individual marks will be communicated to tutors.

Difficulties

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

Michael Spivey
Chairman of Examiners
Final Honour Schools of Computer Science
and Mathematics & Computer Science
(Hilary Term 2007)

**Final Honour Schools of Computer Science
and Mathematics & Computer Science**

Second Public Examination 2007

Declaration form for Practical Work

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

I declare that the reports on practical work 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 no.

Honour school

Signature:

Date:

Final Honour Schools of Computer Science

Second Public Examination 2007

Project Submission Form

This form is to be handed in when the two copies of the project report itself are delivered, but separately from them. The form should be signed and dated.

Name

College

Candidate no.

Honour school

Project title

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Supervisor

I declare that the project report is all my own work except for assistance from my supervisor, and other material clearly indicated.

Signature:

Date: