UNIVERSITY OF CAMBRIDGE DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

COMPUTER SCIENCE TRIPOS, PART IA, 2020

Announcement by the Head of Department

This Announcement relates to Regulation 11 of the Computer Science Tripos which is as follows:

11. A candidate for Part Ia shall submit to the Head of the Department a portfolio of assessed laboratory work. The Head of the Department shall announce not later than the division of the Michaelmas Term next preceding the examination the nature of the laboratory work to be undertaken and the dates by which, and the manner in which, the results of such work are to be presented. The Examiners shall be provided by the Head of the Department with assessments of the work submitted by each candidate, and shall take these assessments into account when assigning marks for the examination.

Work to be Undertaken

During 2019–20, candidates taking Part Ia of the Computer Science Tripos are required to undertake the following 18 units of assessed course work:

- OCaml Practicals — 5 ticks
- Hardware Laboratory — 7 ticks
- Java Practicals — 2 ticks: take-home test 9am Tue 21st April to 9am Thu 23rd April
- Algorithms Practicals — 3 ticks
- Scientific Computing — 1 tick

In addition, candidates taking Paper 3 under Regulation 10 are required to undertake the following 20 units of assessed course work:

- Database Practicals — 3 ticks
- Introduction to Graphics Practicals — 2 ticks
- Machine Learning and Real-world Data Practicals — 12 ticks
- Interaction Design Practicals — 3 ticks

Further details will be given by the proprietors of the associated classes. In particular there are internal deadlines for individual exercises that must be adhered to.

The exercises and experiments will be assessed weekly in term. The work must be completed to a high standard; this requires more than simply obtaining the required result.

Candidates will be interviewed to assess a selection of their reports. Each unit of course work that has been adequately completed will be given a tick. Fractions of ticks will not be awarded.

Submission of Portfolio

To satisfy the requirements of Regulation 14, assessed reports will, once they have been accepted, be retained by the Department.

Candidates should ensure that their portfolio of marks is correctly recorded by 12 noon on Friday 22 May 2020. Any shortfall from the required number of ticks incurs a penalty of 10 marks per missing tick. The maximum penalty is 100 marks (one full paper). It is expected that all candidates achieve all the ticks allocated to their cohort.

A. Copestake
Head of the Department
UNIVERSITY OF CAMBRIDGE DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

NATURAL SCIENCES TRIPOS, PART IA, 2020
(SUBJECT COMPUTER SCIENCE)

Announcement by the Head of the Department

This Announcement applies to candidates who are not Computer Scientists but who are offering Paper 1 of the Computer Science Tripos. The Announcement relates to Regulation 11 of the Computer Science Tripos which is as follows:

11. A candidate for Part IA shall submit to the Head of the Department a portfolio of assessed laboratory work. The Head of the Department shall announce not later than the division of the Michaelmas Term next preceding the examination the nature of the laboratory work to be undertaken and the dates by which, and the manner in which, the results of such work are to be presented. The Examiners shall be provided by the Head of the Department with assessments of the work submitted by each candidate, and shall take these assessments into account when assigning marks for the examination.

Work to be Undertaken

During 2019–20, candidates taking the Computer Science option of Part IA of the Natural Sciences are required to undertake the following 7 units of assessed course work:

- OCaml Practicals — 4 ticks
- Java Practicals — 2 ticks: take-home test 9am Tue 21st April to 9am Thu 23rd April
- Algorithms Practical — 1 tick

Further details will be given by the proprietors of the associated classes. In particular there are internal deadlines for the OCaml, Java and Algorithms exercises that must be adhered to.

The exercises and experiments will be assessed weekly in term. The work must be completed to a high standard; this requires more than simply obtaining the required result.

Candidates will be interviewed to assess a selection of their reports. Each unit of course work that has been adequately completed will be given a tick. Fractions of ticks will not be awarded.

Submission of Portfolio

To satisfy the requirements of Regulation 14, assessed reports will, once they have been accepted, be retained by the Department.

Candidates should ensure that their portfolio of marks is correctly recorded by 12 noon on Friday 22 May 2020. Any shortfall from the required number of ticks incurs a penalty. It is expected that all candidates achieve all the ticks allocated to their cohort.

A. Copestake
Head of the Department
This Announcement relates to Regulation 14 of the Computer Science Tripos which is as follows:

14. A candidate for Part Ib shall submit to the Head of the Department a portfolio of assessed laboratory work. The Head of the Department shall announce not later than the division of the Michaelmas Term next preceding the examination the nature of the laboratory work to be undertaken and the dates by which, and the manner in which, the results of such work are to be presented. The Examiners shall be provided by the Head of the Department with assessments of the work submitted by each candidate, and shall take these assessments into account when assigning marks for the examination.

Note that this Regulation applies to all candidates whether or not they are for honours.

Work to be Undertaken

During 2019–20, Part Ib candidates are required to undertake the following units of assessed course work.

All Part Ib candidates should complete the following ticks:

<table>
<thead>
<tr>
<th>Exercises</th>
<th>Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Further Java course (counting as two ticks)</td>
<td>5pm, 22 November 2019</td>
</tr>
<tr>
<td></td>
<td>5pm, 6 December 2019</td>
</tr>
<tr>
<td>ECAD ticks I and II</td>
<td>12 Noon, 24 January 2020</td>
</tr>
<tr>
<td>C programming tick</td>
<td>12 Noon, 20 January 2020</td>
</tr>
<tr>
<td>Group Project (counting as four ticks)</td>
<td>12 Noon, 6 March 2020</td>
</tr>
<tr>
<td>Security tick</td>
<td>12 noon, 22 May 2020</td>
</tr>
</tbody>
</table>

In addition

Part Ib candidates taking Paper 3 should also complete the following:

- Database Practicals — 3 ticks
- Introduction to Graphics Practicals — 2 ticks
- Machine Learning and Real-world Data Practicals — 12 ticks
- Interaction Design Practicals — 3 ticks

Part Ib candidates taking Paper 7 should also complete the following:

<table>
<thead>
<tr>
<th>Exercises</th>
<th>Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Further Graphics tick</td>
<td>5pm, 31 October 2019</td>
</tr>
</tbody>
</table>

Further information, including details of the reports which must be handed in and the full ticks which will be awarded for a complete set of satisfactory submissions, will be given by the proprietors of the associated classes. In particular there are internal deadlines for individual exercises that must be adhered to.

Candidates will be interviewed about the contents of their reports. The work must be completed to a high standard; this requires more than simply obtaining the required result.
Submission of Portfolio

To satisfy the requirements of Regulation 14, all reports will, once they have been accepted, be retained by the Department.

The Part Ib examiners will be provided with the total number of ticks awarded to each candidate. Any shortfall from the required number of ticks incurs a penalty of 10 marks per missing tick. The maximum penalty is 100 marks (one full paper).

It is expected that all candidates achieve all the ticks allocated to their cohort.

A. Copestake
Head of the Department
This Announcement relates to Regulation 16(a) of the Computer Science Tripos for students in Part II who have already taken Paper 7, which is as follows:

16(a). ... two units of assessment shall be offered, as specified by Notice of the Head of the Department not later than the end of the Easter term next preceding the examination;

Note that this Regulation applies to all candidates whether or not they are for honours.

Work to be Undertaken

Following the announcement of the available units of assessment at the end of Easter Term last, Part II candidates for 2019–20 are required to undertake two of the following units:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Assessment type and mark contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud Computing</td>
<td>Two assignments (70%, 20%) Report (10%)</td>
</tr>
<tr>
<td>Data Science</td>
<td>Four exercises (20%); practical test and report (80%)</td>
</tr>
<tr>
<td>Multicore Semantics</td>
<td>Two assignments (50% of the overall grade each)</td>
</tr>
<tr>
<td>NLP</td>
<td>One exercise (20%); two reports (40% each)</td>
</tr>
<tr>
<td>Advanced Graphics</td>
<td>Two exercises (50%); test (50%)</td>
</tr>
<tr>
<td>DSP</td>
<td>Test (40%); Three exercises (20% each)</td>
</tr>
<tr>
<td>Mobile Robot Systems</td>
<td>Two exercises (30% each); report (24%); presentation (16%)</td>
</tr>
<tr>
<td>Prob. and Computation</td>
<td>One exercise (10%); test (90%)</td>
</tr>
<tr>
<td>Topics in Concurrency</td>
<td>Test (100%)</td>
</tr>
</tbody>
</table>

All assignments, reports, presentations and tests are graded. In addition, there may be exercises which are pass-fail and it is expected that all candidates pass all exercises (if any) in a given unit. Note that there are internal deadlines for individual exercises and tests that must be adhered to. The penalty for late submission is \((n + 10)/40 \times mark\) where \(n\) is the integer part of the number of days late. Further information, including details of the exercises, reports and presentations which must be handed in, will be given by the proprietors of the associated classes.

Submission of Portfolio

To satisfy the requirements of Regulation 16(a), all reports will, once they have been accepted, be retained by the Department. The Part II examiners will be provided with the total number of marks awarded to each candidate.

A. Copestake
Head of the Department