

# Exam Briefing 2022/2023

(for Part 1A students)

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# Introduction

- Some key administrative matters – what exams and where?
- Procedural aspects of exam taking
- Process after taking your exams

# Resources

- CST: Formal guidance and essential information:
  - <https://www.cst.cam.ac.uk/teaching/exams>
- CST: Examinations guidance 2022-23:
  - <https://www.cst.cam.ac.uk/teaching/exams/guidance-2223>
- Cambridge students: Information for students:
  - <https://www.cambridgestudents.cam.ac.uk/exams/students>
- Cambridge students: Guide to exams for students 2022/23:
  - [https://www.cambridgestudents.cam.ac.uk/files/all\\_student\\_guide\\_to\\_examinations\\_2022-23\\_revised\\_may\\_2023.pdf](https://www.cambridgestudents.cam.ac.uk/files/all_student_guide_to_examinations_2022-23_revised_may_2023.pdf)
- Cambridge students: Guide to in-person exams 2022/23
  - [https://www.cambridgestudents.cam.ac.uk/files/student\\_in-person\\_guide\\_to\\_examinations\\_2022-23.pdf](https://www.cambridgestudents.cam.ac.uk/files/student_in-person_guide_to_examinations_2022-23.pdf)

# Practical Matters – When?

Computer Science Tripos, Part IA, 2023 - CST0				
Tuesday 06 Jun	09.00-12.00	1	Computer science Paper 1	<b>Corn Exchange</b>
Wednesday 07 Jun	09.00-12.00	2	Computer science Paper 2	<b>Corn Exchange</b>
Friday 09 Jun	09.00-12.00	3	Computer Science Paper 3	<b>Corn Exchange</b>
Monday 12 Jun	09.00-12.00	MATH/1	Mathematics (Written paper 1)	<b>Sports Hall, Cambridge Sports Centre</b>
Wednesday 14 Jun	09.00-12.00	MATH/2	Mathematics (Written paper 2)	<b>Sports Hall, Cambridge Sports Centre</b>

Only in-person exams this year.

All exams start at 9:00.

Note two physical venues: One for CST, the other for NST.

The schedule above is excerpted from:

[https://www.cambridgestudents.cam.ac.uk/files/main\\_et23\\_v6.pdf](https://www.cambridgestudents.cam.ac.uk/files/main_et23_v6.pdf)

This should also have been sent to you on your examination confirmation form.

# Practical Matters – Where – Do a ‘Dry Run’

“You are required to attend the exam venue in person, unless approval has been given to sit the exam in a different location as a reasonable adjustment. Any application to sit the exam in a different location instead of the exam venue must be made by your College and approval is required before any exam can begin.”

“Students with exam access arrangements (reasonable adjustments) will be in a different venue. This will be shown on your personal timetable within CamSIS.”

Two geographic locations:

- **Corn Exchange** in the city centre for computer-science exams
- **Sports Hall** in West Cambridge for natural science exams

Do not leave until the morning of your exams to work out where these places are.  
Do a practice visit a few days before.

[https://www.cambridgestudents.cam.ac.uk/files/student\\_in-person\\_guide\\_to\\_examinations\\_2022-23.pdf](https://www.cambridgestudents.cam.ac.uk/files/student_in-person_guide_to_examinations_2022-23.pdf)

# In-person exams – Things to take with you

- Your University ID card.
- Your candidate number (also needed for online exams).
- Pens and pencils to write with. Rulers if required.
- Note: All bags must be left outside the examination room in the designated area. This will be different for each examination room and you will be directed by invigilators or examination administrators.

# In-person exams – Things *NOT* to take with you

- Electronic devices (including mobile phones and smart watches)
- Food

4. A candidate may take a small screw-top bottle of water to his or her desk for consumption during an examination session provided that no disturbance is thereby caused to other candidates. Except with the written consent of the Secretary of the Board of Examinations no other items of food or drink may be taken into an examination room. A Supervisor, Invigilator, or Examiner has authority to deprive a candidate of unauthorized items until the examination session is ended.

- Any means of data storage or retrieval
- Any radio or audio equipment

**There is an important list of exceptions to these rules, including relating to medical conditions, in the in-person exam guide. If you have any questions, please direct them to your College Tutor.**

# In-person exams - Calculators

- You are **NOT** allowed to take a calculator into
  - NatSci Maths papers 1 & 2

The red text below usually applies for in-person CompSci exams other than the Maths papers above:

- You are allowed to take an approved calculator into
  - Computer Science papers 1, 2 & 3
- Approved calculators must be marked by the Department (go to Student Administration)
- Only the following will be approved: Casio fx 991, fx 115, fx 570 (any versions)

<https://www.cst.cam.ac.uk/teaching/exams/calculators>

<https://www.admin.cam.ac.uk/reporter/2017-18/weekly/6478/section4.shtml#heading2-21>

# Practical Matters – What: computer-science exams

UNIVERSITY OF CAMBRIDGE  
DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

## Part IA: Structure of Papers 1 and 2 in 2023

### Paper 1

#### Section A

*Attempt 1 question*

- 1 Foundations of Computer Science
- 2 Foundations of Computer Science

#### Section B

*Attempt 1 question*

- 3 Object-Oriented Programming
- 4 Object-Oriented Programming

#### Section C

*Attempt 1 question*

- 5 Introduction to Probability
- 6 Introduction to Probability

#### Section D

*Attempt 1 question*

- 7 Algorithms 1
- 8 Algorithms 1

#### Section E

*Attempt 1 question*

- 9 Algorithms 2
- 10 Algorithms 2

*Attempt five questions on each paper. For Paper 2 answer one question from each of Sections A, B and C, and two questions from Section D*

### Paper 2

#### Section A

*Attempt 1 question*

- 1 Digital Electronics
- 2 Digital Electronics

#### Section B

*Attempt 1 question*

- 3 Operating Systems
- 4 Operating Systems

#### Section C

*Attempt 1 question*

- 5 Software and Security Engineering
- 6 Software and Security Engineering

#### Section D

*Attempt 2 questions*

- 7 Discrete Mathematics
- 8 Discrete Mathematics
- 9 Discrete Mathematics
- 10 Discrete Mathematics

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## Part IA: Structure of Paper 3 in 2023

### Paper 3

#### Section A

*Attempt 1 question*

- 1 Databases
- 2 Databases

#### Section B

*Attempt 1 question*

- 3 Introduction to Graphics
- 4 Introduction to Graphics

#### Section C

*Attempt 1 question*

- 5 Interaction Design
- 6 Interaction Design

#### Section D

*Attempt 2 questions*

- 7 Machine Learning and Real-world Data
- 8 Machine Learning and Real-world Data
- 9 Machine Learning and Real-world Data

*Attempt five questions on the paper; one question from each of Sections A, B and C, and two questions from Section D*

**Attempt five questions** on each of 3 papers. Pay attention to per-section requirements.

<https://www.cl.cam.ac.uk/teaching/exams/exam-structure.pdf>

# Practical Matters – What: natural science exams

## EXAMINATIONS

In the examinations, formulae booklets will not be provided but candidates will not be required to quote elaborate formulae from memory. The use of calculators will not be permitted.

### Part IA Mathematics, courses A and B

These courses are examined in two three-hour written papers, common to both courses, at the end of the year.

The written papers each consist of two sections, A and B. Section A on Paper 1 is based on the A-Level syllabus. All other parts of the written papers are based on these Schedules. Candidates may attempt all questions from Section A and at most 5 questions from section B.

Section A on each paper consists of up to 20 short-answer questions and carries a total of 20 marks. Section B on each paper consists of 10 questions, each of which carries 20 marks. Up to 2 of the questions in Section B of each paper are starred to indicate that they rely on material lectured in the B course but not in the A course. The examination paper shows, for each major subsection of a question, the approximate maximum mark available.

The questions in Section A have clear goals that carry 1 mark (correct) or 0 marks (incorrect or incomplete); no fractional credit is given and it is not necessary to show working. In Section B, partial credit may be available for incomplete answers and students are advised to show their working.

Attempt **all questions** in Section A. Attempt **five questions** in Section B.

<https://www.cl.cam.ac.uk/teaching/exams/exam-structure.pdf>

# Practical Matters – What if I answer more questions?

We are asked this question every year, hence this slide.

All questions submitted are marked, but only 5 marks per paper will count.

Which 5 are entirely **at the discretion of the examiners.**

The questions chosen will obey the sectioning rules (e.g. 1 from Section A, etc), and will not necessarily be those with the highest marks.

**It is the opinion of the examiners that you are better off spending any extra time you feel you might have by attempting to improve your 5 answers than by starting and submitting an extra question.**

# Practical Matters – Who's who?

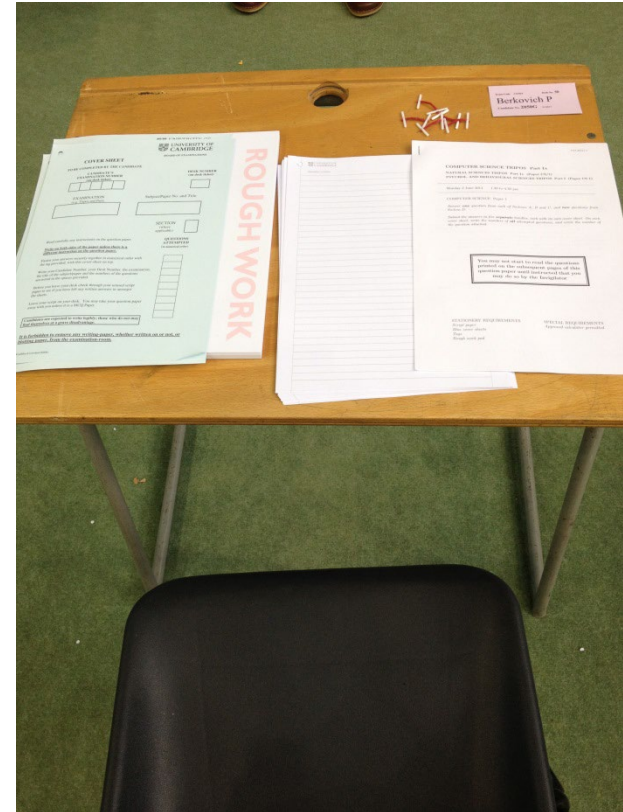
- Supervisor, Invigilators, and Assistants
- Examiners – only present for first 20 mins, but you can ask questions after that.
- Proctor (rare)
- (not in the room) Assessors

# In-person exams – what happens when

- Aim to be outside 30-20 mins early. You may be admitted before the advertised time. (You will be allowed in *up to* 30 mins late)
- You will only see the exam cover. An invigilator will tell you when you can open the exam paper and start.
- You should read the whole paper before you start writing.
- Allow roughly 30 mins per question ( $180 \div 5 = 36$ ) for CS papers, do similar calculations for Section A/B for the two Maths papers.
- There will be a 5-minute warning before the end of the exam.
- You must stop writing when instructed at the end of the exam.
- You may then fill in the cover sheet (if you haven't already).
- You may leave once your paper is collected.
- If you need to use the toilet during the exam, raise your hand.
- Note: There will be a clock in each examination room

# In-person exams – the desk

- On your desk will be:
  - The exam paper
  - A stock of writing paper
  - A stock of clearly marked rough working paper (probably!)
  - A card with your name and examination number, and the number of your desk
  - Some cover sheets
  - Some tags



# Practical Matters – exam paper page one (Maths)



## NATURAL SCIENCES TRIPOS      Part IA

Monday, 10 June, 2019    9:00 am to 12:00 pm

NST0, CST0

### MATHEMATICS (1)

**Before you begin read these instructions carefully:**

*The paper has two sections, A and B. Section A contains short questions and carries 20 marks in total. Section B contains ten questions, each carrying 20 marks.*

*You may submit answers to **all** of section A, and to no more than **five** questions from section B.*

*The approximate number of marks allocated to a part of a question is indicated in the right hand margin.*

**Write on one side of the paper only and begin each answer on a separate sheet.** (For this purpose, your section A attempts should be considered as one single answer.)

Questions marked with an asterisk (\*) require a knowledge of B course material.

**At the end of the examination:**

*Tie up **all of your section A answer** in a single bundle, with a completed blue cover sheet.*

*Each section B question has a number and a letter (for example, **11Z**). Answers to these questions must be tied up in **separate** bundles, marked **R, S, T, V, W, X, Y** or **Z** according to the letter affixed to each question. **Do not join the bundles together.** For each bundle, a blue cover sheet **must** be completed and attached to the bundle, with the correct letter **R, S, T, V, W, X, Y** or **Z** written in the section box.*

*A **separate** green master cover sheet listing all the questions attempted **must** also be completed. (Your section A answer may be recorded just as A: there is no need to list each individual short question.)*

**Every cover sheet must bear your examination number and desk number. Calculators are not permitted in this examination.**


#### STATIONERY REQUIREMENTS


6 blue cover sheets and treasury tags  
Green master cover sheet  
Single-sided script paper  
Rough paper

#### SPECIAL REQUIREMENTS

You may not start to read the questions  
printed on the subsequent pages until  
instructed to do so by the Invigilator.

# Practical Matters – Cover sheet (in-person form)

**COVER SHEET**

UNIVERSITY OF  
CAMBRIDGE

Candidate Number

1	2	3	4	X
---	---	---	---	---

Desk Number

100
-----

Examination  
(e.g. Tripos and Part)

COMPUTER SCIENCE1A
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Subject / Paper Number  
and Title

PAPER 1
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Section  
(where applicable)

A
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Questions Attempted

①	3	5	7	9			
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**During the examination**

- You must not have any electronic device unless indicated on the question paper
- Read carefully the instructions on the question paper
- Ask an invigilator if you need extra paper
- Write legibly

**After the examination**

- Complete all the sections above
- Number your pages, and fasten them to this cover sheet with the tag provided
- You may take away your question paper, unless instructed otherwise
- You may not take away any stationery

# Practical Matters – Illness/incapacity/mitigating circumstances

- If a problem occurs in the time before the exams that is likely to disturb your revision or performance in the exam itself **tell your Tutor ASAP.**
  - Your college may submit a **warning letter**, which will be used as evidence if you apply for an **allowance** after the exams. (An allowance is a mark or class adjustment granted in certain circumstances, in particular on account of *“illness or other grave cause”*.)
  - If it is a medical matter see a GP as the GP may be asked to provide a note
- If a problem occurs on the day **contact your college Porters’ Lodge, who will contact your Tutor.**
- If a problem occurs in the exam hall put your hand up and **inform an invigilator.**

# Practical Matters – What can I ask the examiners?

- You can't ask questions like this:
  - ❖ What is the answer to Question 3?
  - ❖ Is the answer to Question 3 "x"?
- But you can ask, for example:
  - ✓ Is this question correct as printed?

$$\text{Simplify } F = A.\bar{B}.C.\bar{D}.E + A.C.D + A.C.\bar{F}.G.\bar{H} + A.B.C.\bar{D}.E + A.C.D.\bar{E} + \bar{E}.\bar{H}$$

# After the exam – What happens?

- Collection
- Sorting
- Marking
- Checking
- Practical marks

# After the exam – Practical marks

All of you should have gained the full set of “units of assessed course work” (aka *ticks*), as specified in the Head of Department’s notices.

The Marking and Classing document says:

“Mark penalties will be applied to act as a deterrent to missing a tick. The Part IA Examiners are supplied with a final tick list. Each missing tick will receive a penalty of 10 marks (10% of a paper). The maximum penalty is 100 marks (one full paper).”

# After the exam – Classing I

We have a total mark, now we need to draw class boundaries

We follow the rules set out in the Marking and Classing document:

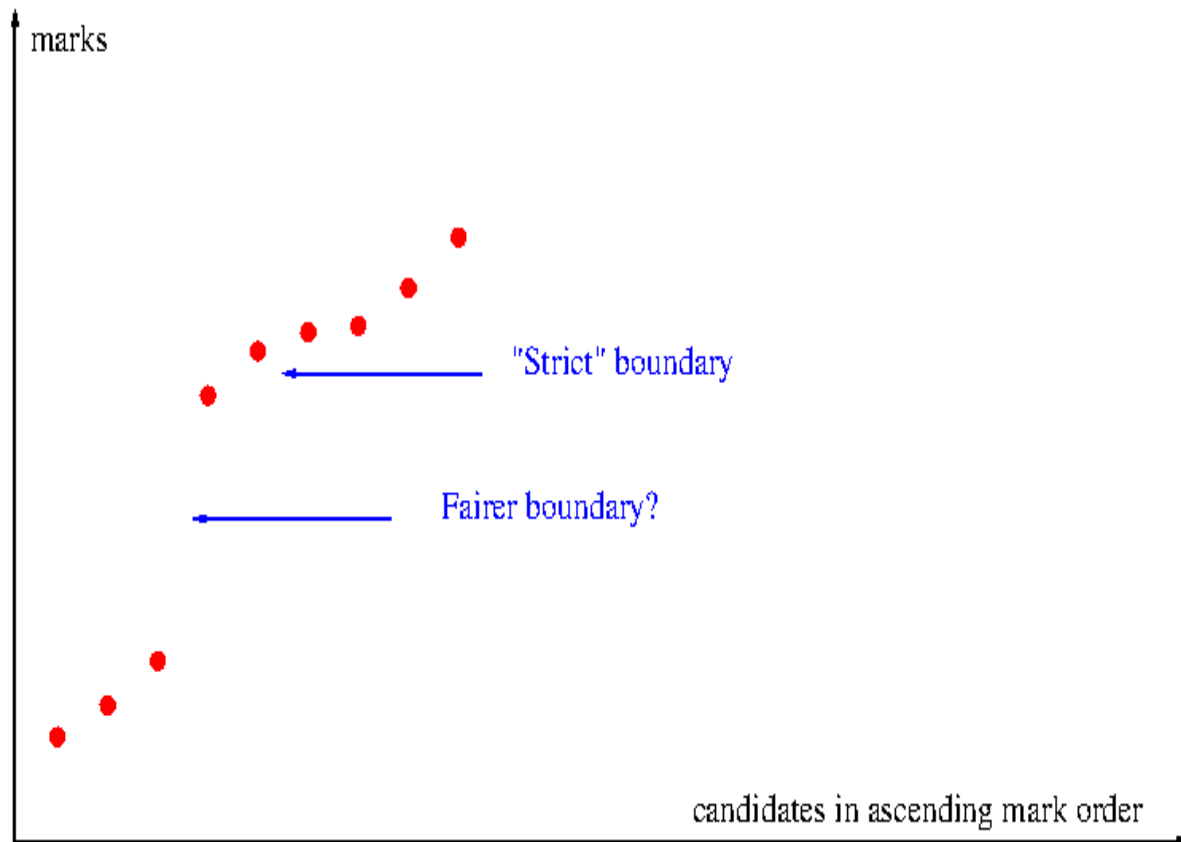
<https://www.cl.cam.ac.uk/teaching/exams/classing.pdf>

which states that examiners will partition the order-of-merit table thus:

- First 25%
- Upper Second 55%
- Lower Second 12.5%
- Third and Unclassed 7.5% (unclassified = mark below 40%)

# After the exam – Classing II

Examiners will actually use graphs like this, scatterplots, to determine the class boundaries



# After the exam - Results

Computer Science results will be published on **Friday 7 July**, in the afternoon (after 2pm).

They are published on CamSIS.

Initial results will just be the class and paper marks, Directors of Studies will be given more information a day or two later.

# Examination Reviews, Informal Mark Check

Once you get your exam marks, if you think we've made a mistake you may make an informal request for a mark check.

This should be done through your Director of Studies, who will have to approve it.

For example, if you are sure you should have gained 20 marks on question X, but were awarded 2, then you can ask your DoS to check.

We have done such checks many times over the years and have never found a recording or addition mistake; these things are double or even triple checked.

# Examination Reviews, Formal Appeals

There is a formal procedure for appeals:

- If you are unhappy about something concerning the conduct of the exam you need to fill in the **Representations to Examiners Form** within 5 days.
- After the classlist is published if you believe a mistake has been made you need to fill in the **Examination Review Form** within 28 days of publication.

Your Tutor (or CUSU) can point you at the forms and advise you. Any form received will be handled in accordance with the University **Examination Review Procedure**.

<https://www.cst.cam.ac.uk/teaching/exams/ExamReview>

<https://www.studentcomplaints.admin.cam.ac.uk/examination-review>

# After the appeals – Uh oh!

It must be stressed that **very very** few people fail!

Fewer than 1% in Computer Science

The University will not say “You have failed” – it will simply not publish your name in the classlist. However, you may be granted an allowance to remain.

**What happens next is up to your college**

All will have some kind of internal appeals procedure but unless you are granted an allowance the rules are straightforward and as you would expect.

**The regulations do not allow re-sits**

# Computer Science Briefing Lecture

Copies of these slides will be available via:

<https://www.cst.cam.ac.uk/teaching/exams/guidance-2223>