



PRELIMINARY EXAMINATION IN MATHEMATICS TRINITY TERM 2023

Notice to Candidates

To: First year students in Mathematics and Mathematics & Statistics

Timetable

The examination timetable has now been published on the Examination Schools website: <u>http://www.ox.ac.uk/students/academic/exams/timetables</u> and candidates can access their individual timetable via Student Self Service. Note that examinations will be held in week 9, Monday 19th June to Friday 23rd June 2023, at either **Examination Schools** or **Ewert House, Summertown** (unless alternative arrangements have been approved and are in place). Papers commence at 9.30am or 2.30pm.

Format of Examination Papers

There are five Prelims papers, of varying length:

Mathematics I	2.5 hours long
Mathematics II	2.5 hours long
Mathematics III	3 hours long
Mathematics IV	2.5 hours long
Mathematics V	2 hours long

The paper Mathematics I has seven questions and is divided into two sections. Candidates should submit answers to three out of four questions in section A and two out of three questions on section B. You should not submit answers to more than five questions.

The paper Mathematics II has seven questions and is divided into three sections. Candidates should submit answers to two out of three questions in section A, two out of three questions in section B and the one question in section C. You should not submit answers to more than five questions.

The paper Mathematics III has nine questions and is divided into three sections. Candidates should submit answers to two out of three questions in section A, two out of three questions in section B and two out of three questions in section C. You should not submit answers to more than six questions.

The paper Mathematics IV has seven questions and is divided into three sections. Candidates should submit answers to two out of three questions in section A, two out of three questions in section B and the one question in section C. You should not submit answers to more than five questions.

The paper Mathematics V has six questions and is divided into two sections. Candidates should submit answers to two out of three questions in section A and two out of three questions in section B. You should not submit answers to more than four questions.

Each question is marked out of 20 and is divided into two to four parts. The marks available for each part will be given on the examination paper.

Candidates are recommended to submit no more than the number of answers, as described by a paper's rubric. Should a candidate submit further answers, all submitted work will be marked with the best answers that meet the rubric's requirements counting.

Full particulars of the syllabus and examination content are to be found in the Handbook for the Undergraduate Mathematics courses; full regulations governing the examinations are to be found in the Examination Decrees and Regulations 2022/23.

Candidate Number

Your candidate number will be on your individual timetable available through Student Self Service. Please note that your candidate number is not the same as your student self-service ID number which is printed on your university card. If you forget your candidate number you will be given the opportunity to ask one of the invigilators what it is. Please do not write down a number if you think it may be incorrect.

Conduct of Examination Sessions

You should arrive at least 20 minutes before the start of each paper. You must take your university card with you and display the card photo side up throughout each examination. You may take your writing equipment into the examination room and your individual timetable, provided you have not written on it or otherwise modified it. Details of other items which you are permitted to take with and the list of disallowed items be found you can online at: http://www.ox.ac.uk/students/academic/exams/guidance. Please note that mobile phones are included in the list of disallowed items and must not be taken into the examination room.

Desks will be arranged in numerical order and seating charts will be displayed throughout the reception area as well as outside individual examination rooms and will show candidate and desk numbers. On reaching your desk you should check that the correct question paper has been provided but should not open the paper until the invigilator declares the start of the examination.

You may not leave the examination room except with the permission of the invigilator. Candidates are not permitted to leave during the first 30 minutes nor the last 30 minutes of an examination. You may take your question paper with you at the end of the examination but no other paper may be removed from the examination room.

Queries during the Examination

Attendance of Assessors will not be possible in the examination. If a candidate believes there is an error in the examination paper, they should state their assumption of the exam question within their exam script. This will then enable the Exam Board to investigate and if necessary take the error into consideration in the normal way.

Handing-in of Scripts

Read this section very carefully.

You should begin each question in a new answer booklet and write your candidate number on each booklet. You must order your answer booklets by question number and secure with the treasury tag provided. You should write the numbers of all the questions to be marked on the front cover

sheet. If you answer fewer than the required number of questions you must submit and empty answer booklet for each unanswered question so that you still submit an appropriate number of answer booklets in total. If you have not attempted any questions, you must hand in an empty booklet, with the front page completed, stating that no questions were attempted.

Rough work

No special paper is provided for rough work. A separate answer booklet may be used for rough working, and should be labelled as such: these booklets must be handed in at the end of the examination. Alternatively, you may do rough working in the same booklet as your fair copy. In this case you should cross through all rough working to indicate very clearly to the examiners what is to be marked and what is not.

Illegible scripts

Please write legibly and remember that you must not write in pencil, except to draw diagrams. Examiners may require illegible scripts to be transcribed. The cost of transcription is charged to the candidate.

Calculators

The use of calculators will not be permitted in these examinations.

Illness

If you are prevented by illness or other cause from attending any part of the examination you should ensure that the Senior Tutor of your college is informed immediately. In the case of illness, a medical certificate will be required.

Marking of Papers

Marking schemes for the questions should aim to ensure that the following qualitative criteria hold:

16–20 marks A completely, or almost completely, correct answer, showing excellent understanding of the concepts and skill in carrying through the arguments and/or calculations; minor slips or omissions only.

11–15 marks A good though not complete answer, showing understanding of the concepts and competence in handling the arguments and/or calculations, and some evidence of problem-solving ability. Such an answer might consist of an excellent answer to a substantial part of the question, or a good answer to the whole question which nevertheless shows some flaws in calculation or in understanding or in both.

6–10 marks Standard material has been substantially and correctly answered with some possible minor progress on to other parts of the question.

0–5 marks Some progress has been made with elementary, accessible material.

This should be regarded as a guide conveying the intentions of the Moderators.

Standardised Marks

The Preliminary Examination is an unclassified examination in which candidates are awarded overall either a distinction, pass or fail. However, marks for each individual examination will be reported in university standardised form (USM). Full details can be found in the Examination Conventions,

https://www.maths.ox.ac.uk/members/students/undergraduate-courses/examinations-assessments/examination-conventions

Classification

The standardised marks for written papers and marks for Computational Mathematics projects (CM) will be averaged according to the following two formulae:

$$Av_{1} = \frac{MI + MII + \frac{6}{5}(MIII) + MIV + \frac{4}{5}(MV) + \frac{1}{3}CM}{5\frac{1}{3}}$$
$$Av_{2} = \frac{MI + MII + \frac{6}{5}(MIII) + MIV + \frac{4}{5}(MV)}{5}$$

each symmetrically rounded (e.g. 62.49 will be rounded down and 62.50 will be rounded up).

Candidates shall be deemed to have passed the examination if they have satisfied the Moderators in all five papers and the practical assessment.

The outcome of the Preliminary Examination will be awarded according to the following conventions:

Distinction: Both: $Av_1 \ge 70$ and $Av_2 \ge 70$, and a mark of at least 40 on each paper and for the practical assessment.

Pass: Not meriting a Distinction and a mark of at least 40 on each paper and for the practical assessment.

Partial Pass: A partial pass is awarded to candidates who obtain a mark of at least 40 on three or more of Papers I-V but do not meet the criteria for a pass or distinction.

Fail: A mark of less than 40 on three or more papers.

Notification of Results

You will be notified via email when your results are ready. To find out your results you may log on to the Student Self Service at <u>https://www.ox.ac.uk/students/selfservice</u> using your Oxford Single Sign-On. Neither Schools staff nor Mathematical Institute staff can give results over the telephone.

The Moderators will provide candidates who partially pass or fail the First Public Examination at their initial attempt with as detailed a breakdown of marks as is available for all the failed papers. University guidance permits candidates who fail any Prelims papers, and are planning to re-sit the examination, to see their examination scripts for any papers which they have failed. Further details will be circulated to those to which this will apply.

Academic Appeals

If you have any queries or concerns about the appeal process please refer to the University guidelines: <u>https://www.ox.ac.uk/students/academic/complaints</u>

Professor Andrew Dancer Chair of Examiners April 2023