

Examiners' Report  
 Final Honour School of Mathematics and Philosophy Part C  
 Trinity Term 2022

**Part I**

**A. STATISTICS**

- **Numbers and percentages in each class.**

See Table 1, page 1.

- **Numbers of vivas and effects of vivas on classes of result.**

Not applicable.

- **Marking of scripts.**

All Philosophy scripts, essays and theses were double-marked. The mathematics dissertations and mini-projects were double-marked. All Mathematics examination scripts were, as is the normal practice, single-marked according to carefully checked model solutions and a pre-defined marking scheme which is closely adhered to. A comprehensive independent checking procedure is also followed. (See the Mathematics Part C report for details.)

Table 1: Numbers in each class

	Number					Percentages %				
	2022	(2021)	(2020)	(2019)	(2018)	2022	(2021)	(2020)	(2019)	(2018)
I	7	(6)	(6)	(6)	(8)	58.33	(50)	(75)	(66.67)	(72.73)
II.1	4	(4)	(2)	(2)	(3)	33.33	(33.33)	(25)	(22.22)	(27.27)
II.2	0	(2)	(0)	(0)	(0)	0	(16.67)	(0)	(0)	(0)
III	0	(0)	(0)	(1)	(0)	0	(0)	(0)	(11.11)	(0)
F	1	(0)	(0)	(0)	(0)	8.33	(0)	(0)	(0)	(0)
Total	12	(12)	(8)	(9)	(11)	100	(100)	(100)	(100)	(100)

## **B. Changes in examining methods and procedures currently under discussion or contemplated for the future**

In this year's mathematics Part C exams, candidates were permitted to prepare a 'Summary Sheet', one sheet of A4 paper containing formulae, theorems, etc., and take it into the exam with them. This was a transitional arrangement for those who had not taken closed-book university exams before because of COVID. It seems likely that Summary Sheets will no longer be permitted in 2023 examinations, this is a matter for the mathematics department.

As in Part II.D below, the examiners recommend that Mathematics and Philosophy Part C should move from classifying out of I/II.1/II.2/III/Fail to Distinction/Merit/Pass/Fail.

## **C. Notice of examination conventions for candidates**

The notice to candidates was issued on 11th May 2022. These contain details of the examinations and assessments.

All notices and the examination conventions for 2022 examinations are on-line at <http://www.maths.ox.ac.uk/members/students/undergraduate-courses/examinations-assessments>.

## Part II

### A. General Comments on the Examination

The examiners were pleased by the high standard of the candidates, resulting in a large proportion of firsts. The top-scoring Mathematics and Philosophy Part C candidate got a higher average mark on their Mathematics papers than the top-scoring Mathematics Part C candidate.

The examiners are very grateful to James Knight in the Philosophy Centre, and Anwen Amos, Clare Sheppard, Charlotte Turner-Smith, Waldemar Schlackow, Matt Brechin in the Mathematical Institute for their enormous help at all stages in the conduct of this examination. We would also like to thank the rest of the Academic Administration Team for all their work during the busy exam period. We are grateful also to examiners and assessors in Philosophy and in Mathematics who set papers and marked scripts and theses of candidates in this examination.

The internal examiners are grateful to the external examiners Prof James Robinson (Mathematics) and Dr Karim Thebault (Philosophy) for generously performing their special roles in this process.

### B. Equality and Diversity issues and breakdown of the results by gender

Table 2, page 3 shows percentages of male and female candidates for each class of the degree.

Table 2: Breakdown of results by gender

Class	Number											
	2022			2021			2020			2019		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
I	3	4	7	2	4	6	2	4	6	1	5	6
II.1	1	3	4	2	2	4	1	1	2	1	1	2
II.2	0	0	0	1	1	2	0	0	0	0	0	0
III	0	0	0	0	0	0	0	0	0	0	1	1
F	0	1	1	0	0	0	0	0	0	0	0	0
Total	4	8	12	5	7	12	3	5	8	2	7	9
Class	Percentage											
	2022			2021			2020			2019		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
I	75	50	58.33	40	57.14	50	66.67	80	75	50	71.43	66.67
II.1	25	37.5	33.33	40	28.57	33.33	33.33	20	25	50	14.29	22.22
II.2	0	0	0	20	14.29	16.67	0	0	0	0	0	0
III	0	0	0	0	0	0	0	0	0	0	14.29	11.11
F	0	12.5	8.33	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100	100	100

Table 3: Statistics by paper (Mathematics papers)

Paper	Number of Candidates	AvgRaw	StdevRaw	Avg USM	StdevUSM
C1.1	6	34.67	12.68	72.33	19.85
C1.4	7	31.86	8.47	72.29	12.3

Table 4: Statistics by paper (Philosophy papers)

Paper	Number of Candidates	Avg USM	StDevUSM
PT Thesis in Philosophy	8	68.86	6.67

### C. Detailed numbers on candidates' performance in each part of the exam

See Table 3, page 4 for the number of candidates taking each Mathematics paper, together with statistics for the raw marks (average and standard deviation), and USMs (average and standard deviation) attained on each paper by this cohort. All papers listed are units except the Mathematics Dissertation, which is a double unit. The total maximum raw marks for a unit is 50 whilst the USMs are scaled to a maximum of 100. In accordance with University guidelines, statistics are not given for papers where the number of candidates was five or fewer in the public version of this report.

See Table 4, page 4 for the number of candidates taking each Philosophy paper, together with statistics for the USMs (average and standard deviation) attained in the examination and the extended essay in each subject by this cohort.

## **D. Recommendations for Next Year's Examiners and Joint Committee for Mathematics and Philosophy**

In 2021, Mathematics Part C moved from classifying out of I/II.1/II.2/III/Fail to classifying out of Distinction/Merit/Pass/Fail, for compatibility with the OMMS degree (essentially Mathematics Part C taken as a stand-alone 1 year MSc). OMMS has been classified out of Distinction/Merit/Pass/Fail since its inception in 2018-19, as this is the university norm for masters-level courses. However, Mathematics and Philosophy Part C has continued to classify out of I/II.1/II.2/III/Fail.

The board recommends that Mathematics and Philosophy Part C should move to classifying out of Distinction/Merit/Pass/Fail, as soon as the regulations can be changed to allow this, for compatibility with Mathematics Part C and OMMS.

We note that after rounding, the avUSM borderlines for I/II.1/II.2/III/Fail are 70/60/50/40, but the avUSM borderlines for Distinction/Merit/Pass/Fail are 70/65/50. Thus, candidates with  $60 \leq \text{avUSM} < 65$  who would previously have received a II.1 would now get a Pass rather than a Merit, and candidates with  $40 \leq \text{avUSM} < 50$  who would previously have received a III would now get a Fail. No candidates fell into these categories this year.

As for MMath, the MMathPhil degree should be doubly classified: candidates should receive a classification from I/II.1/II.2/III/Fail for their work in the second and third years, and a classification from Distinction/Merit/Pass/Fail for their work in the fourth year, and both classifications should appear on their degree transcript. The Part C examiners are giving a classification for the fourth year work only, not for the entire degree.

## **E. Comments on sections and on individual questions**

See reports from Mathematics examiners and from Philosophy examiners.

## **F. Names of members of the Board of Examiners**

Mathematics

Prof. Dominic Joyce (Chair)

Prof. Jason Lotay

Prof. James Robinson (External Examiner)

Philosophy

Prof. Alexander Paseau

Prof. Peter Millican

Dr. Karim Thebault (External Examiner)