

Examiners' Report:  
FHS Mathematics and Philosophy Part A  
Michaelmas Term 2022

November 30, 2022

**Part I**

**A Statistics**

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

See Table 1, page 1.

Table 1: Numbers in each class

| Range  | Numbers |      |      |      |      | Percentages % |       |       |       |       |
|--------|---------|------|------|------|------|---------------|-------|-------|-------|-------|
|        | 2022    | 2021 | 2020 | 2019 | 2018 | 2022          | 2021  | 2020  | 2019  | 2018  |
| 70–100 | 6       | 4    | 5    | 4    | 0    | 37.5          | 25    | 29.41 | 26.67 | 0     |
| 60–69  | 7       | 9    | 7    | 4    | 11   | 43.75         | 56.25 | 41.18 | 26.67 | 73.33 |
| 50–59  | 2       | 2    | 5    | 6    | 4    | 12.5          | 12.5  | 29.41 | 40    | 26.67 |
| 40–49  | 1       | 1    | 0    | 1    | 0    | 6.25          | 6.25  | 0     | 6.67  | 0     |
| 30–39  | 0       | 0    | 0    | 0    | 0    | 0             | 0     | 0     | 0     | 0     |
| 0–29   | 0       | 0    | 0    | 0    | 0    | 0             | 0     | 0     | 0     | 0     |
| Total  | 16      | 16   | 17   | 15   | 15   | 100           | (100) | (100) | (100) | (100) |

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

Not applicable.

- **Marking of scripts.**

The same system of checking was used as in all parts of FHS Mathematics. There are no Philosophy papers in FHS Part A in Mathematics & Philosophy.

- **Numbers taking each paper.**

See table 3 on page 5

## **B. New examining methods and procedures**

Exams returned to their in-person format following two years of online exams during the pandemic.

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

None.

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

The first notice to candidates was issued on 30th March 2022 and the second notice on the 9th June 2022.

These can be found at <https://www.maths.ox.ac.uk/members/students/undergraduate-courses/ba-master-mathematics/examinations-assessments/examination-20>, and contain details of the examinations and assessments. The course handbook contains the web link to the full examination conventions and all candidates are issued with this at induction in their first year.

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

# 1 Part II

## A. General Comments on the Examination

### Acknowledgements

- Elle Styler for her work in supporting the Part A examinations throughout the year, and for her help with various enquiries throughout the year.
- Waldemar Schlackow for running the database and the algorithms that generate the final marks, without which the process could not operate.
- Clare Sheppard for her help and support, together with the Academic Administration Team, with marks entry, script checking, and much vital behind-the-scenes work.
- The assessors who set their questions promptly, provided clear model solutions, took care with checking and marking them, and met their deadlines, thus making the examiners' jobs that much easier.
- Several members of the Faculty who agreed to help the committee in the work of checking the papers set by the assessors.
- The internal examiners and assessors would like to thank the external examiners, Prof Neil Strickland and Prof John Billingham, for helpful feedback and much hard work throughout the year, and for the important work they did in Oxford in examining scripts and contributing to the decisions of the committee.

### Timetable

The examinations began on Monday 13th June and ended on Friday 24th June.

### Mitigating Circumstances Notices to Examiners

A sub-set of the Examiners (the 'Mitigating Circumstances Panel') attended a pre-board meeting to band the seriousness of the individual notices. The outcome of this meeting was relayed to the Examiners at the final exam board, who gave careful regard to each case, scrutinised the relevant candidates' marks and agreed actions as appropriate. See Section E for further detail.

### Determination of University Standardised Marks

For the papers that are common with Mathematics, the examiners followed the standard procedure for converting raw marks to University Standardized Marks (USM), and used the same scaling functions as applied for candidates in Mathematics.

### Recommendations for Next Year's Examiners and Teaching Committee

There are no recommendations specific to Mathematics & Philosophy. General recommendations are made in the report on the Mathematics Part A examination.

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

Table 2 on page 4 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   |      |       |
|        | Female | Male | Total | Female | Male | Total | Female | Male | Total |
| 70–100 | 1      | 5    | 6     | 0      | 4    | 4     | 1      | 4    | 5     |
| 60–69  | 0      | 7    | 7     | 2      | 7    | 9     | 1      | 6    | 7     |
| 50–59  | 0      | 2    | 2     | 2      | 0    | 2     | 4      | 1    | 5     |
| 40–49  | 1      | 0    | 0     | 1      | 0    | 1     | 0      | 0    | 0     |
| 30–39  | 0      | 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0     |
| 0–29   | 0      | 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0     |
| Total  | 2      | 14   | 16    | 5      | 11   | 16    | 6      | 11   | 17    |

  

| Class  | Percentage |       |       |        |       |       |        |       |       |
|--------|------------|-------|-------|--------|-------|-------|--------|-------|-------|
|        | 2022       |       |       | 2021   |       |       | 2020   |       |       |
|        | Female     | Male  | Total | Female | Male  | Total | Female | Male  | Total |
| 70–100 | 50         | 35.71 | 37.5  | 0      | 36.36 | 25    | 16.67  | 36.36 | 26.51 |
| 60–69  | 0          | 50    | 43.75 | 40     | 63.64 | 56.25 | 16.67  | 54.55 | 35.61 |
| 50–59  | 0          | 14.29 | 12.5  | 40     | 0     | 12.5  | 66.67  | 9.09  | 37.88 |
| 40–49  | 50         | 0     | 6.25  | 20     | 0     | 6.25  | 0      | 0     | 0     |
| 30–39  | 0          | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0     |
| 0–29   | 0          | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0     |
| Total  | 100        | 100   | 100   | 100    | 100   | 100   | 100    | 100   | 100   |

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

Table 3 on pages 5 gives the statistics for each paper of the examination. Details on papers with 5 candidates or less are not given.

Table 3: Overall statistics for each paper

| Paper | Candidates | average Raw | sdRaw | average USM | sdUSM |
|-------|------------|-------------|-------|-------------|-------|
| A0    | 16         | 33.62       | 11.07 | 67.62       | 14.77 |
| A2    | 16         | 62.06       | 20.89 | 69          | 13.13 |
| A3    | 9          | 24.78       | 9.72  | 62.38       | 14.23 |
| A5    | 12         | 30.42       | 9.22  | 69.33       | 10.7  |

### D. Comments on papers and individual questions

There are no questions specific to Mathematics and Philosophy. Comments on all papers are made in the report on the Mathematics Part A examination.

### E. Names of members of the Board of Examiners

- **Examiners:**

Prof. Alan Lauder (Chair)  
Prof Jan Obloj  
Prof. Konstantin Ardakov  
Prof. Derek Moulton  
Prof Neil Strickland (External Examiner)  
Prof John Billingham (External Examiner)

- **Assessors:**

Dr Jinbeom Bae  
Prof. Andrew Dancer  
Prof. Ben Green  
Prof. Andre Henriques  
Prof. Sam Howison  
Dr. Nicholas Jones  
Prof. Marc Lackenby  
Prof. Renauld Lambiotte  
Prof. Philip Maini  
Dr Lucas Mason-Brown  
Prof. James Maynard  
Prof. Kevin McGerty  
Dr Otto Overkamp  
Dr Emilio Rossi Ferucci  
Prof. Tom Sanders  
Prof. James Sparks

Prof. Balazs Szendroi  
Prof. Sarah Waters  
Prof. Andrew Wathen  
Prof. Stuart White