# Examiners' Report: Final Honour School of Mathematics \& Philosophy Part B Trinity Term 2020 

March 5, 2021

## Part I

## A. Statistics

- Numbers and percentages in each class.

See Table 1, page 1.

Table 1: Numbers in each class

|  | Number |  |  |  |  | Percentages \% |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 2020 | $(2019)$ | $(2018)$ | $(2017)$ | $(2016)$ | 2020 | $(2019)$ | $(2018)$ | $(2017)$ | $(2016)$ |
| I | 8 | $(4)$ | $(6)$ | $(6)$ | $(5)$ | 50 | $(30.77)$ | $(50)$ | $(46.15)$ | $(41.67)$ |
| II.1 | 5 | $(8)$ | $(5)$ | $(7)$ | $(6)$ | 31.25 | $(61.54)$ | $(41.67)$ | $(53.85)$ | $(50)$ |
| II.2 | 3 | $(1)$ | $(2)$ | $(0)$ | $(1)$ | 18.75 | $(7.69)$ | $(8.33)$ | $(0)$ | $(8.33)$ |
| III | 0 | $(0)$ | $(0)$ | $(0)$ | $(0)$ | 0 | $(0)$ | $(0)$ | $(0)$ | $(0)$ |
| P | 0 | $(0)$ | $(0)$ | $(0)$ | $(0)$ | 0 | $(0)$ | $(0)$ | $(0)$ | $(0)$ |
| F | 0 | $(0)$ | $(0)$ | $(0)$ | $(0)$ | 0 | $(0)$ | $(0)$ | $(0)$ | $(0)$ |
| Total | 16 | $(13)$ | $(13)$ | $(13)$ | $(12)$ | 100 | $(100)$ | $(100)$ | $(100)$ | $(100)$ |

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

Not applicable.

- Marking of scripts.

All Philosophy scripts, essays and theses are double-marked, after which the two markers consult in order to agree a mark between them. If the two markers are unable after discussion to agree a mark, the mark is decided by a third examiner, within the range of the two initial marks. All Mathematics scripts were, as is the normal practice, single-marked according to carefully checked model solutions and a pre-defined marking scheme closely adhered to. A comprehensive independent checking procedure is also followed. (See the Mathematics Part B report for details). BEE extended essays and coursework for BO1.1 History of Mathematics, BN1.1 Mathematics Education and BN1.2 Undergraduate Ambassadors' Scheme were double-marked.

## B. New examining methods and procedure in the 2020 examinations

In light of Covid 19, the department took steps to mitigate the impact of the pandemic on academic performance. This included changing the examinations to open-book version of the standard exam papers, reducing the units required from 8 to 6 , the introduction of the safety net and Declared to have Deserved Honours. In addition, the method of assessing mitigating circumstances at the exam board was changed. An additional hour was also added on to the Mathematics exam duration to allow candidates the technical time to download and submit their examination papers via Weblearn. Given the unusual circumstances and impact of Covid-19, ranking was only used for the purposes of awarding prizes. The introduction of the safety net (which was applied to cohorts) meant that the overall average and hence rank was not well defined.

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

Due to the uncertainty with the pandemic, the department decided that exams will be taken online for Trinity Term 2021.

## D. Notice of examination conventions for candidates

The first Notice to Candidates was issued on 24 February 2020 and the second notice on 5 May 2020.

All notices and the examination conventions for 2020 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 are very grateful to James Knight in the Philosophy Faculty and Nicole Collins, Waldemar Schlackow, Charlotte Turner-Smith, Elle Styler and the rest of the academic administration team in the Mathematical Institute for their enormous help at all stages in the conduct of this examination. We are grateful also to examiners and assessors in Philosophy and in Mathematics who set papers and marked scripts and essays of candidates in this examination.
The internal examiners are grateful to the external examiners Prof. Marco Schlichting (Mathematics) and Prof. Alexander Bird (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 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  |  | 2019 |  |  | 2018 |  |  |
|  | Female | Male | Total | Female | Male | Total | Female | Male | Total |
| I | 2 | 6 | 8 | 2 | 2 | 4 | 1 | 5 | 6 |
| II. 1 | 4 | 1 | 5 | 3 | 5 | 8 | 1 | 4 | 5 |
| II. 2 | 1 | 2 | 3 | 0 | 1 | 1 | 1 | 1 | 2 |
| III | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| P | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 7 | 9 | 16 | 5 | 8 | 13 | 3 | 10 | 13 |
| Class | Percentage |  |  |  |  |  |  |  |  |
|  | 2020 |  |  | 2019 |  |  | 2018 |  |  |
|  | Female | Male | Total | Female | Male | Total | Female | Male | Total |
| I | 28.57 | 66.67 | 47.62 | 40 | 25 | 30.77 | 33.33 | 55.56 | 50 |
| II. 1 | 57.14 | 11.11 | 34.13 | 60 | 62.5 | 61.54 | 33.33 | 44.44 | 41.67 |
| II. 2 | 14.29 | 22.22 | 18.26 | 0 | 12.5 | 7.69 | 33.33 | 11.11 | 8.33 |
| III | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| P | 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

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. It should be noted that the total raw marks for a unit are 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.

Table 3: Statistics by paper (Mathematics papers)

| Paper | Number of Candidates | AvgRaw | StdevRaw | Avg USM | StdevUSM |
| :--- | :--- | :--- | :--- | :--- | :--- |
| B1.1 | 14 | 40.64 | 7.03 | 70.07 | 14.64 |
| B1.2 | 15 | 31.4 | 10.32 | 66.87 | 16.17 |
| B2.1 | 1 | - | - | - | - |
| B3.1 | 4 | - | - | - | - |
| B3.4 | 2 | - | - | - | - |
| B3.5 | 3 | - | - | - | - |
| B4.1 | 3 | - | - | - | - |
| B4.2 | 1 | - | - | - | - |
| B5.5 | 1 | - | - | - | - |
| B8.5 | 5 | - | - | - | - |
| SB3.1 | 1 | - | - |  |  |

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 on each paper by this cohort. In accordance with University guidelines, statistics are not given for papers where the number of candidates was five or fewer.

Table 4: Statistics by paper (Philosophy papers)

| Paper | Number of <br> Candidates | Avg <br> USM | StDev <br> USM |
| :--- | :---: | :--- | :--- |
| 101 Early Modern Philosophy 3 | - | - |  |
| 102 Knowledge and Reality | 13 | 61.08 | 18.66 |
| 103 Ethics | 1 | - | - |
| 104 Philosophy of Mind | 1 | - | - |
| 107 Philosophy of Religion | 1 | - | - |
| 108 The Philosophy of Logic and Language | 5 | - | - |
| 109 Aesthetics and Philosophy of Criticism | 1 | - | - |
| 112 The Philosophy of Kant | 1 | - | - |
| 118 The Later Philosophy of Wittgenstein | 3 | - | - |
| 122 Philosophy of Mathematics | 16 | 64.13 | 7.05 |
| 124 Philosophy of Science | 1 | - | - |
| 127 Philosophical Logic | 9 | 62.22 | 13.91 |
| 198 Special subject | 1 | - | - |

## D: Comments on papers and individual questions

See reports from Mathematics Examiners and from Philosophy Examiners.

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

Prof. Ben Green (Chair)
Prof Peter Millican
Prof. Cornelia Drutu
Prof. Simon Saunders
Prof. Marco Schlichting (external)
Prof. Alex Bird (external)

