# Examiners' Report: FHS Mathematics and Philosophy Part A Michaelmas Term 2020

March 3, 2021

# Part I

### A Statistics

• Numbers and percentages in each class.

See Table 1, page 1.

Table 1: Numbers in each class

					III Cacii Ciass					
Range	Numbers					Percentages %				
	2020	2019	2018	2017	2016	2020	2019	2018	2017	2016
70–100	5	4	0	4	6	29.41	26.67	0	30.77	46.15
60-69	7	4	11	4	6	41.18	26.67	73.33	30.77	46.15
50-59	5	6	4	5	1	29.41	40	26.67	38.46	7.69
40-49	0	1	0	0	0	0	6.67	0	0	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	17	15	15	13	13	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 4

#### B. New examining methods and procedures

In light of Covid 19, the department took steps to mitigate the impact of the pandemic. This included changing the examinations to an open-book versions of the standard exam papers and delaying Part A examinations so that they took place in Michaelmas term 2020. An additional 30 minutes (with the exception of A2 which had 1 hour) was added on to the exam duration to allow candidate the technical time to download and submit their examination papers via Weblearn.

# 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 26th February 2020 and the second notice on the 8th September 2020.

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

The examiners are very grateful to 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 Mathematics who set papers and marked scripts and essays of candidates in this examination.

The internal examiners are grateful to the external examiners Prof. Prof Jelena Grbic and Prof Demetrios Papageorgiou for generously performing their special roles in this process.

#### Timetable

The examinations began on Monday 5th October and ended on Friday 16th October.

#### 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

Table 2: Breakdown of results by gender									
Class	Number								
		2020		2019			2018		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
70–100	1	4	5	1	3	4	0	0	0
60–69	1	6	7	1	3	4	5	6	11
50-59	4	1	5	4	2	6	2	2	4
40-49	0	0	0	0	1	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	6	11	17	6	9	15	7	8	15
Class	Percentage								
		2020		2019			2018		
		2020			2019			2010	
	Female		Total	Female		Total			Total
70–100			Total 26.51			Total 26.67			Total 0
70–100 60–69	Female	Male		Female	Male		Female	Male	
	Female 16.67	Male 36.36	26.51	Female 16.67	Male 33.33	26.67	Female 0	Male 0	0
60–69	Female 16.67 16.67	Male 36.36 54.55	26.51 35.61	Female 16.67 16.67	Male 33.33 33.33	26.67 26.67	Female 0 71.43	Male     0   75	0 73.33
60–69 50–59	Female 16.67 16.67 66.67	Male 36.36 54.55 9.09	26.51 35.61 37.88	Female 16.67 16.67 66.67	Male 33.33 33.33 22.22	26.67 26.67 40	Female 0 71.43 28.57	Male 0 75 25	0 73.33 26.67
60–69 50–59 40–49	Female 16.67 16.67 66.67 0	Male 36.36 54.55 9.09 0	26.51 35.61 37.88 0	Female 16.67 16.67 66.67 0	Male 33.33 33.33 22.22 11.11	26.67 26.67 40 6.67	Female 0 71.43 28.57 0	Male 0 75 25 0	$0 \\ 73.33 \\ 26.67 \\ 0$

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

Table 3 on pages 4 gives the statistics for each paper of the examination.

Table 3: Overall statistics for each paper

Paper	Candidates	average Raw	$\operatorname{sdRaw}$	average USM	sdUSM
A0	17	34.29	8.11	70.12	12.94
A2	17	69.24	13.9	65.53	12.46
A3	10	40	6.96	67.6	14.18
A4	4	28.5	10.08	60.75	15.76
A5	13	37.62	7.17	65.38	14.56
A8	5	34.8	5.76	65.2	7.98
ASO	2	30.5	6.36	58.5	7.78

# 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 Nikolay Nikolov (chair)

Dr Neil. Laws

Prof. Fernando Alday

Prof. Alexander Scott

Prof. Zhongmin Qian

Prof Jelena Grbic (External Examiner)

Prof Demetrios Papageorgiou (External Examiner)

#### • Assessors:

Prof. Charles Batty

Dr Joshua Bull

Prof. Ben Green

Prof Heather Harrington/Prof. Andrew Fowler

Prof. Peter Howell

Prof. Sam Howison

Prof. Philip Maini

Dr Carlo Meneghelli

Prof. Irene Moroz

Prof. Balazs Szendroi

Prof. Ulrike Tillmann

Dr Andre Henriques

Prof. Yuji Nakatsukasa

Prof. Tom Sanders

Prof. James Maynard

Prof. Marc Lackenby

Prof. Chris Beam

Adam Gal

Nils Matthes

Chris Lester

Lucie Domino

Daniel Woodshouse

Andrew Donald Mcleod