

Examiners' Report  
Oxford Masters in Mathematical Sciences (OMMS)  
Trinity Term 2020

## 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 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. The Mathematics dissertations and mini-projects were double-marked. A comprehensive independent checking procedure is also followed. (See the Mathematics Part C report for details.)

Table 1: Numbers in each class

	Number		Percentages %	
	2020	2019	2020	2019
Distinction	27	16	65.85	50.0
Merit	7	6	17.07	18.8
Pass	5	9	12.2	28.1
DDM	2	-	4.88	-
Fail	0	1	0	3.1
Total	41	32	100	100

## **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 Masters (DDM). 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 19th February 2020 and the second notice on 6th May 2020. These contain details of the examinations and assessments.

All notice and the examination conventions for 2020 are available on-line at:

<https://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c/examinations-and-assessments/part-c-and-omms>.

## Part II

### A. General Comments on the Examination

The examiners would like to convey their grateful thanks for their help and cooperation to all those who assisted with this year's examination, either as assessors or in an administrative capacity. The chairman would particularly like to thank Nicole Collins for administering the whole process with efficiency, and also to thank Elicia Styler, Charlotte Turner-Smith and Waldemar Schlackow.

The internal examiners are grateful to the external examiners, Prof. Richard Jozsa, Dr Jon Woolf and Prof. Christophe Andrieu for generously performing their special roles in this process.

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

Table 2, page 4 shows percentages of male and female candidates for each class of the degree.

Table 2: Breakdown of results by gender

Class	Number					
	2020			2019		
	Female	Male	Total	Female	Male	Total
Distinction	5	22	27	4	12	16
Merit	3	4	7	1	5	7
Pass	1	4	5	3	6	9
DDM	0	2	2	-	-	-
Fail	0	0	0	0	1	1
Total	9	32	41	8	24	32

  

Class	Percentage					
	2020			2019		
	Female	Male	Total	Female	Male	Total
Distinction	55.56	68.75	62.16	50.0	50.0	50.0
Merit	33.33	12.5	22.92	12.5	20.8	18.8
Pass	11.11	12.5	11.81	37.5	25.0	28.1
DDM	0	6.25	6.25	-	-	-
Fail	0	0	0	0	4.2	3.1
Total	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. 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.

Table 3: Statistics by paper (Mathematics papers)

Paper	Number of Candidates	AvgRaw	StdevRaw	AvgUSM	StdevUSM
C1.1	-	-	-	-	-
C1.2	-	-	-	-	-
C1.3	-	-	-	-	-
C1.4	-	-	-	-	-
C2.1	-	-	-	-	-
C2.2	-	-	-	-	-
C2.3	-	-	-	-	-
C2.4	-	-	-	-	-
C2.5	-	-	-	-	-
C2.6	-	-	-	-	-
C2.7	-	-	-	-	-
C3.1	-	-	-	-	-
C3.2	-	-	-	-	-
C3.3	-	-	-	-	-
C3.4	-	-	-	-	-
C3.5	-	-	-	-	-
C3.7	-	-	-	-	-
C3.8	-	-	-	-	-
C3.9	8	-	-	82	3.78
C3.10	-	-	-	-	-
C4.1	-	-	-	-	-
C4.3	-	-	-	-	-
C4.4	-	-	-	-	-
C4.6	-	-	-	-	-
C4.8	-	-	-	-	-
C5.1	-	-	-	-	-
C5.2	-	-	-	-	-
C5.4	20	-	-	76.85	5.91
C5.5	-	-	-	-	-
C5.6	-	-	-	-	-
C5.7	-	-	-	-	-
C5.9	-	-	-	-	-
C5.10	-	-	-	-	-
C5.11	-	-	-	-	-

Paper	Number of Candidates	AvgRaw	StdevRaw	AvgUSM	StdevUSM
C5.12	-	-	-	-	-
C6.1	9	36.78	6.12	65.44	8.69
C6.2	8	33	4.28	64	7.48
C6.3	-	-	-	-	-
C6.4	-	-	-	-	-
C6.5	12	-	-	67.58	4.23
C7.1	-	-	-	-	-
C7.4	-	-	-	-	-
C7.5	-	-	-	-	-
C7.6	-	-	-	-	-
C8.1	-	-	-	-	-
C8.2	-	-	-	-	-
C8.3	-	-	-	-	-
C8.4	-	-	-	-	-
SC1	-	-	-	-	-
SC2	-	-	-	-	-
SC4	6	36.67	5.61	71.83	9.87
SC5	-	-	-	-	-
SC6	-	-	-	-	-
SC7	-	-	-	-	-
SC8	-	-	-	-	-
SC9	-	-	-	-	-
SC10	-	-	-	-	-
CCS1	-	-	-	-	-
CCS2	7	81.14	12.28	81.14	12.28
CCS3	-	-	-	-	-
CCD	38	-	-	74.97	9.18
COD	-	-	-	-	-

## D. Recommendations for Next Year's Examiners and OMMS Supervisory Committee

Examiners feel that the department should reconsider the rule on re-scaling of the 50 raw mark , and how this information should be communicated to assessors- i.e. 50 raw mark is for outstanding candidates and that the work for these candidates should significantly show this.

## E. Comments on sections and on individual questions

See reports from Mathematics examiners.

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

Internal Examiners:

Prof. H Oberhauser

Prof. J Kristensen

Prof. D Joyce,

Prof. L Nguyen

Prof. Q Wang

Prof. Robin Evans

Prof. James Martin

Prof. R Jozsa (External)

Dr. J Woolf (External)

Prof. Christophe Andrieu (Stats External)