# **MSc in Mathematical and Computational Finance**

# Examiners' Report 2020-21

### July 2021

# Part I

## A. **STATISTICS**

### i. Numbers and percentages in each class/category

Class	Number			Percentage (%)		
	2020/21	2019/20	2018/19	2020/21	2019/20	2018/19
Distinction	10	13	8	29	35	33
Merit	16	14	8	46	38	33
Pass	8	10	8	23	27	33
Fail	1	0	0	2	0	0

### ii. If vivas are used:

No candidates were examined viva voce.

### iii. Marking of scripts

The four written examinations and two take home exams were set and singlemarked by lecturers on examined courses and script-checked by a D.Phil. student.

The two C++ practical exams were marked by a lecturer and checked by a D.Phil student.

All dissertations were read and marked independently by two Examiners/Assessors with discrepancies resolved by the Examiners/Assessors.

### B. NEW EXAMINING METHODS AND PROCEDURES

Due to the Covid-19 pandemic, Papers A, B, C and D and the two C++ assessments were offered as online open-book examinations via the Weblearn platform. Candidates were expected to download the relevant paper at 9.30am on the day of the examination. For paper A and C and the two C++ assessments candidates were given an additional hour of technical time to upload their submissions. For Papers B and D candidates were given an additional 30 minutes of technical time to upload their submissions.

# C. Please list any changes in examining methods, procedures and conventions which the examiners would wish the faculty/department and the divisional board to consider.

No changes were recommended by the examiners for 2021-22.

## Part II

### A. GENERAL COMMENTS ON THE EXAMINATION

None

### B. EQUAL OPPORTUNITIES ISSUES AND BREAKDOWN OF THE RESULTS BY GENDER

There were 15 female candidates and 21 male candidates. Among the 15 females, 4 received a distinction, 6 received a merit, and 5 received a pass. While among the 21 males, 6 received distinctions, 10 received a merit, and 3 received a pass. One male student recorded an outcome of Fail, and one male student has registered to postpone studies.

### C. NUMBERS ON CANDIDATES' PERFORMANCE IN EACH PART OF THE EXAMINATION

The move to open book exams did not have a significant affect on the mark distributions. The lower tail was slightly longer than normal with fewer easy bookwork questions. The written papers required some small amount of scaling from raw marks to USMs.

The deep learning take home exam and the C++ Part II exam had exceptionally high marks. The exam board decided to scale these marks to bring them into line with the other components of the examination.

Exam	Distinction	Merit	Pass	Fail	Average USM	Standard Deviation
Paper A	12	6	14	3	65	10.61
Paper B	12	7	16	0	69	10.49
Paper C	12	7	12	4	64	10.23
Paper D	13	2	16	4	62	14.56
Component I	12	7	15	1	65	9.01
C++ Part I	13	12	10	0	66	5.44
C++ Part II	31	3	0	1	73	5.79
Statistics Take Home	16	11	7	1	69	9.57
Deep Learning Take Home	29	4	1	1	70	12.75
Component II	24	7	3	1	70	6.10
Dissertation (Component III)	15	13	6	1	68	14.34
OVERALL	10	16	8	1	67	8.69

### D. COMMENTS ON PAPERS AND INDIVIDUAL QUESTIONS

None

# E. COMMENTS ON THE PERFORMANCE OF IDENTIFIABLE INDIVIDUALS AND OTHER MATERIAL WHICH WOULD USUALLY BE TREATED AS RESERVED BUSINESS

None

### F. NAMES OF MEMBERS OF THE BOARD OF EXAMINERS

Prof Ben Hambly (Chairman) Prof Hanqing Jin Prof Rama Cont Prof. Michael Monoyios Prof Vicky Henderson (External, Warwick)