

MSc in Mathematical and Computational Finance

Examiners' Report 2020-21

July 2022

Part I

A. STATISTICS

i. Numbers and percentages in each class/category

Class	Number				Percentage (%)			
	2021/22	2020/21	2019/20	2018/19	2021/22	2020/21	2019/20	2018/19
Distinction	13	10	13	8	30	29	35	33
Merit	10	16	14	8	23	46	38	33
Pass	19	8	10	8	44	23	27	33
Fail	1	1	0	0	2	2	0	0

ii.

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 single-marked 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.

NEW EXAMINING METHODS AND PROCEDURES

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

There was one student who applied for special arrangement for paper C and D due to a covid infection. The examination for this student was conducted in a separate meeting room with online invigilation via MS Teams. The exam paper was placed in an envelope and the student was instructed to begin his exam via MS teams. Examination for both paper C and D went well.

B. 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

Overall, examinations went well.

Some students felt uncomfortable when we moved examinations from online to in-person in April with worries on possible virus spreading. It turned out that we only had one student applying for a separate examination because of a covid positive test result, and we made special arrangements for this student in the form of online invigilation.

In the submission of the dissertation, 9 students applied for extensions, most of which were due to the confidential check from their internships. These extensions delayed the finalisation of three final grades, but all were completed within one week after the final examiners’ meeting. In the future, we need to remind all dissertations going with internship about this possible delay and check with individual companies two weeks before the submission deadline.

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

There were 15 female candidates and 28 males. Among the 15 female students, 3 received a distinction, 3 received a merit, and 8 received a pass, while one student failed the course. Among the 28 male students, 10 received distinctions, 7 received a merit, and 11 received a pass.

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

The written papers, statistics take home exam and C++ Part I 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	14	8	18	3	65	9.12
Paper B	13	5	21	4	63	11.89
Paper C	12	7	19	5	62	13.45

Paper D	10	11	12	10	61	14.86
Component I	14	6	17	6	63	10.27
C++ Part I	15	3	22	3	63	14.06
C++ Part II	17	14	10	2	68	13.72
Statistics Take Home	17	10	14	2	68	10.68
Deep Learning Take Home	24	3	14	2	69	13.65
Component II	18	8	14	3	67	9.33
Dissertation (Component III)	19	15	9	0	69	8.61
OVERALL	13	10	19	1	66	7.70

D. COMMENTS ON PAPERS AND INDIVIDUAL QUESTIONS

In general, the students performed well, especially in C++ Part 1 and 2 and the take home exams.

Their performance in Paper D – Electives was however very poor. In paper D, 6 students attempted Question 2 on Advanced Numerical Method, and they obtained an average raw mark of 7.0 out of 25; 18 students attempted Question 5 on Algo trading, and they obtained 10.1 on average; 8 students attempted Question 6 on Optimisation, and they received 11.3 on average.

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

The prize for the highest marks achieved for the MCF course was awarded to the top student with a final USM of 81.

Three candidates have submitted mitigating circumstances for January exams/assessments and the examiners examined these carefully and took the appropriate action.

One student failed the overall examination performance. They achieved less than 45% in component 1 consisting of the four written papers, and marginally passed component 2 and component 3. The student will be allowed to resit all the exams in component I in the next year.

F. NAMES OF MEMBERS OF THE BOARD OF EXAMINERS

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