

## REPORT ON EXAMINATIONS 2015-16

### M.Sc. in Mathematical and Computational Finance

#### Part I

#### A. STATISTICS

##### (1) Numbers and percentages in each class/category

##### (a) Classified examinations

Class	Number			Percentage (%)		
	2015/16	2014/15	2013/14	2015/16	2014/15	2013/14
Distinction	5	8	7	19	26	23
Pass	22	22	22	81	74	73
Fail	0	0	1	0	0	3

##### (2) If vivas are used:

No candidates were examined viva voce.

##### (3) Marking of scripts

The four written examinations were set and marked by lecturers on examined courses, and checked by a D.Phil. student.

Mini projects were double marked by two Assessors independently and discrepancies were reconciled by Assessors/Examiners.

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 one Examiner and one Assessor with discrepancies resolved by the Examiners. Each presentation of a dissertation was assessed by the Examiner who marked the dissertation.

#### B. NEW EXAMINING METHODS AND PROCEDURES

There was no change in the examining methods and procedures.

#### 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.

The procedures worked well for this year.

**D. Please describe how candidates are made aware of the examination conventions to be followed by the examiners (Please attach a copy of the conventions and any other relevant documentation to the report.)**

Candidates were addressed by the Course Director in Michaelmas Term and details of marking conventions are posted on the web and in the handbook.

## **Part II**

### **A. GENERAL COMMENTS ON THE EXAMINATION**

The exams ran fairly smoothly.

As usual, we continue to have difficulty in getting exam setters to provide draft questions / solutions to the external examiner in plenty of time, but we are doing better in providing them fully typeset.

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

There were 5 female candidates and 22 males. Among the 5 females, 2 received distinctions. While among the 22 males, 3 received distinctions.

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

The written papers required some small amount of scaling from raw marks to USMs. Papers A and B were sat in January, papers C, D1 and D2 in April. The standard of papers was comparable to past years.

Paper A: 10 Distinction level performances and 4 fail

Paper B: 9 Distinction level performances and 1 fail

Paper C: 7 Distinctions and 2 fail

Paper D1: 3 Distinctions and 1 fail (13 of the 27 candidates took this paper)

Paper D2: 5 Distinctions and 1 fail (14 of the 27 candidates took this paper)

There was 1 mini project offered to the students, Quantitative Risk Management in addition to the compulsory C++ course.

9 dissertations achieved a Distinction level mark, the top mark was 73.6.

### **D. COMMENTS ON PAPERS AND INDIVIDUAL QUESTIONS**

For the practical exam in Paper D2, we gave the students a choice of either MATLAB or R; this was due to the lecturer saying that they would have a choice. However, next year we will aim to avoid this by making it clear beforehand which language will be used. We will also further improve the details for uploading the completed assignments at the end of the exam.

There was feedback from the students that the practical questions were not particularly tough but required a lot of typing and debugging, with some students struggling to complete the exam in time. As a result,

there were informal discussions within the faculty about whether we were convinced that a practical exam was appropriate for this subject. However, there was no clear consensus so we will continue with the current arrangement for next year but try to make the questions more intellectually challenging but at the same time shorter.

Overall, it was felt that the standard of the dissertations was not as high as in past years. This resulted in lower marks for the dissertation, especially at the top end, and fewer Distinctions.

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

Professor Mike Giles (Chairman)

Professor Michael Monoyios

Professor Xunyu Zhou

Dr Mike Tehranchi (External, Cambridge)