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External Examiners Report 2012: Final Honour School of Mathematics Part C

1. General Remarks

I am pleased to report on the continued high standard of examination papers set by the School of Mathematics for students in year 4 of the MMath (and related degrees in Mathematics & Computer Science, Mathematics & Philosophy, and Mathematics & Statistics). The whole examination process was conducted very thoroughly and efficiently. I consider that the whole examination process was conducted with rigour and in such a way as to ensure equality of treatment for students.

2. Assessment Process

The examination papers were set at an appropriate standard and the assessment process was rigorous. I am also fully content that the process has been conducted following both the institutional regulations and the guidance of the teaching committee. Given the choice of modules available in part C different students take different examination papers. In making sure the assessment process is fair to all students it is therefore important that the examination papers are as far as possible of equal difficulty. The setting, checking and reviewing process ensured that in most cases there was only minor variability between the difficulty of the various examination papers. Furthermore any unexpected variability in difficulty is taken into account through the mapping of raw marks onto USM. There is a provisional formula for doing this but this is modified to take account of input from the examiners concerning the quality of the answers. This is done with great care and judgement and I fully support this process and would not wish it to be replaced by a purely mechanical procedure (as is done in some universities). This process is greatly helped by the detailed reports that are provided by the great majority of assessors. However in a few cases the reports were extremely brief and of only little help in this process. I would therefore like to recommend that full and detailed reports on all the examination papers are provided by the assessors for the examiners meeting. I also think it would be beneficial for assessors to be given feedback on the mapping of raw marks to USM so that they know how to fine tune the level of examination questions in future. I had some concerns that not all assessors had taken on board the lessons from the previous year concerning the relative difficulty of their examination paper.

3. Comparability of Standards

The examination papers were set at a high standard and students who did well were certainly worthy of a first class degree from a top rank university such as Oxford. I am entirely satisfied by the standards of the examination papers when it comes to assessing the majority of these

students, but I still worry that in some cases the examination papers did not give an appropriate opportunity for students at the bottom end of the scale to show their ability. Although there were fewer cases of this than in the past two years there were still a couple of papers where this is a problem and in these few cases there was more scaling than was desirable at the very bottom of the scale. I fully appreciate that it is very difficult to construct an examination paper which is appropriate for both the highfliers and those at a lower level but in my view it would be helpful to remind the setters of the examination papers of the departmental guidance "that the questions should be such that a II(i)/II(ii) borderline student should be able to gain at least half of the marks". The position has certainly improved but given the changes in assessors from year to year it will be important to be vigilant in this regard.

4. Issues for the Teaching Committee

Both the academic standards and the quality of assessment are very high but there are some ways in which the examination process could potentially be improved.

- Full and detailed reports on the examination papers should be provided by all assessors.
- Feedback should be provided to assessors on any scaling applied to the raw marks in mapping them to USM marks to enable them to make appropriate adjustments to the standard of examination questions in future years.
- Setters should be reminded of the need to produce examination papers suitable for the full range of ability of the current cohort of MMath students.

5. Good Practice

I would like to commend the Department on the quality of background information provided on the content of the modules that proved extremely helpful to me in judging the difficulty of the various examination questions. I would also like to commend the department on the very few typos in the draft examination papers and solutions and thank them for the full and considered replies they gave to any comments I had on the draft papers.

Yours sincerely



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