

Part III Committee: Responses to Examiners' reports 2013

The Part III Committee has considered the External Examiners' reports on the Part III examinations 2012-13, and also the report by the Internal Examiners.

We note with pleasure that the three Externals all comment favourably on the high standards of Part III.

Professor Buzzard says:

Part III is easily the toughest Masters-level course in the UK and I am glad to see that Cambridge are keeping it this way...

Professor Kendall says:

As in previous years, I have been very impressed by the very high standard of courses and the performance of the very substantial number of students at Distinction and Merit level.

The Part III of the Cambridge Mathematical Tripos is a remarkable feature of the Departments of Mathematics and the University of Cambridge, and is a national and world asset...

Professor McDonald says:

Part III continues to be well-run and of extremely high standard. It rightly attracts and stretches the most mathematically talented students from across the world.

Responses to Examiners' reports

The Internal Examiners recommend that the changes implemented in 2012-13 should be continued and we support this. It was especially helpful to have the earlier essay marking deadline, and Professors Kendall and McDonald were appreciative of the Externals' information folders.

Information for Part III Examiners: We support the Internal Examiners' recommendation that documentation is written for the Part III Examiners. There is already a letter from the Chairman of the Faculty to IA, IB and II Examiners, and we recommend that a similar letter is written for the Part III Examiners. A draft letter is attached. It would need revision in the light of Faculty Board decisions related to the Examiners' recommendations.

Checkers: The Internal Examiners recommend that the duties of checkers at Part III is made clear. Checkers are involved at two stages in Part III exams: once for checking the draft exam papers, and then also for checking the marking. Given that Examiners at Part III cannot reasonably be expected to be able to assess the scientific level of all the papers for which they are responsible, we think it is important that checkers of draft papers are able to comment on whether or not the paper is of an appropriate standard, and so we agree that this checker should not be a PhD student.

For the checking of marking, we recognise the need for two checking processes: one process is similar to that for checkers of undergraduate exams, and involves checking that each page of each script has been marked, providing an arithmetic check and checking the transcription of marks. The other process is to check that the standard of marking and the drawing of boundaries have been carried out appropriately. For many Part III papers, both mark checking processes can be done by the same person (ie a colleague or post-doc), but for large Part III courses the first type of checking could be carried out by a PhD student. At the moment the mark sheet asks the checker to sign that they are satisfied with the marking standard of each script and that they have checked the transcription of marks onto the mark sheet. We recommend having two separate statements to be signed by a checker according to the two processes above.

Whatever decisions are reached by the Faculty Board about the roles of Part III checkers, we recommend that the relevant documentation (including the attached draft letter to the Examiners) is updated.

Professor Buzzard also mentions the importance of careful checking for those who are new to being assessors for Part III. We support this, and have included a sentence to this effect in the draft letter to the Examiners.

Additional support with the Part III marks program: We agree with the recommendation that another on-site person should be trained in the internal workings of this program. This person should be available during the Examiners' final meeting, and the few days preceding this, to deal with problems.

Available information on the marklist: Both Professors Kendall and McDonald recommend adding information on counts of units at various quality grades to the marklist produced by the Part III marks program. Professor Kendall recommends removing the Optimum Grade column. If these changes are feasible and relatively easy to carry out, then we recommend that they are implemented.

Other points from Professor Buzzard's report: We are very grateful for Professor Buzzard's swift and efficient handling of the late paper. We understand that there were extenuating circumstances for the paper in question. However we recommend that it is made clear in the relevant documentation that submission of draft papers includes submission of typed questions, solutions, markscheme, annotation as to bookwork/unseen parts of questions, and that the paper has been checked.

Other points from Professor Kendall's report: Professor Kendall recommends changing the Faculty recommended percentage of Merits to a recommended percentage of Distinctions plus Merits. As a result, the Merits/Honours borderline would not be contingent on the Distinction/Merit borderline, so that, for example, the Externals would have a clearer indication of who the Merit/Honours borderline candidates might be when they are looking at scripts on the day before the final meeting. We support this in principle. The current Faculty

guidelines are 35-40% Distinctions and 20-25% Merits. As a starting point for discussion, we recommend 35-40% Distinctions and 55-60% Distinctions plus Merits.

Professor Kendall also recommends the institution of a prize in pure mathematics. If there is a suitable donation then we would be in favour of a prize in pure mathematics. We are not concerned about the monetary value of such a prize.

Other points from Professor McDonald's report: We agree with Professor McDonald's comment about the importance of indicating bookwork and unseen parts of questions. We are also in sympathy with Professor McDonald's comment that "bookwork" is not sufficient as a solution (or part solution). The note to assessors already makes these two points. We recommend that the Examiners are vigilant in checking that assessors have complied with these two points before signing papers off as ready to be sent to Externals.

Professor McDonald recommends having two External Examiners for the applied and theoretical physics papers. We strongly support this.

Acknowledgements: In view of the appreciation expressed in all the Examiners' reports of the high quality of the administrative handling of the Part III examinations by the Undergraduate Office and especially by Amy Dittrich, we recommend that the Faculty Board expresses its thanks to Amy Dittrich and Mitha Madhu. We also recommend that Dr Keith Carne is thanked for his work with the Part III marks program.

The Part III Committee thanks the External Examiners for their excellent work with Part III examinations this year, and for their helpful recommendations. Professors Kendall and McDonald are at the end of their terms as External Examiners and we thank them for all their work over the last three years.

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