

## Draft Minutes of Examination meeting 07-08

Wednesday 9<sup>th</sup> July 2008 16.00: Ryle Seminar Room

Present: Dr W Allison, Dr R E Ansorge, Dr C H W Barnes, Dr P Cicuta, Dr E Eiser, Dr V Gibson, Dr D A Green, Prof S F Gull, Prof C A Haniff, Dr H P Hughes, Prof R J Needs, Dr R Padman, Prof R T Phillips, Prof D A Ritchie, Dr W O Saxton, Prof C G Smith, Prof M A Thomson, Prof D R Ward, Prof B R Webber.

Apologies: Prof P B Littlewood.

In Prof Littlewood's absence the meeting was chaired by Prof Ward, Deputy Head of Department (Teaching).

1. Each year's examination had been reviewed and the presentations were given in the order of Part IA, Part IB, Part III and Part II. They are recorded in agenda order. Following the presentations the examination was discussed. The comments and main issues arising are listed below.

The comments below should be read in the context of the examiners' reports (available on-line), and the detailed comments from reviewers (see appendices).

2. Part IA. Reviewed by Dr Saxton. [Appendix 1]
  - a. Prof Gull (Senior Examiner) raised the issue of the moderation of the IA Practical marks. Some of the marks had been adjusted on the database but not on the marksheets. There was consensus that Head of Class moderation did not add any value, and that statistical moderation of demonstrator marks would be acceptable.
  - b. Question C10 had an average mark of only 3.7/15, which was much lower than for any of the others. There was discussion of the correct approach to such anomalies – Dr Saxton suggested that in future candidates could be given the average of their other marks in such cases. Prof Gull suggested that instead the appropriate course was for the Senior to request that those scripts be remarked to achieve a 'fairer' mark distribution.
  - c. The overall consensus was that it had been a successful examination.
3. Part IB Physics A & B. Reviewed by Dr Green. [Appendix 2]
  - a. It was noted that in Part IB, the rubric for Section A specified five out of six questions to be answered, while in Parts IA and II, Section A is compulsory. The overall rubric also differed in other respects between Physics A and Physics B, which is potentially confusing for candidates. The TC will consider whether rubrics should in future be "owned" by the Committee.
  - b. Dr Green also asked whether Physics B candidates not also taking Part IB Maths for NST could be allowed to skip Section D (questions on Mathematical Methods) if they chose. The TC's thinking was that an element of compulsion was required to ensure that students do the necessary work on the Mathematical Methods course.
  - c. Prof Gull raised the issue of short notes and essay questions, and whether it was necessary to force students to answer questions of this type. The general feeling appeared to be that it was reasonable to expect students to be able to write, but there was distress at the wide range of inconsistent marking criteria applied by different sets of Examiners. The TC will

consider drafting guidelines for future years.

4. Part II. Reviewed by Prof Smith. [Appendix 3]

- a. The error in Paper 3 was attributed in part to the fact that there was only one astrophysicist on the Board. It is proposed that in future the need to have a setter and checker in each of the four “options courses” be taken into account when appointing examiners.
- b. An in depth discussion took place regarding the moderation of the TP1 marks (which as Further Work, are not covered by Moore’s algorithm). The examiners had applied an ad-hoc scaling to this unit, in order to bring about a desired class for a few specific candidates, without leading to a huge increase in firsts beyond the number justified by cohort tracking. Although the procedure was widely felt to be unsatisfactory, it was not clear what the correct procedure should have been.
- c. Part of the confusion arises because of the conflict between the descriptive classing criteria in the Departmental policy and the desire to class strictly by mark, with marks boundaries being adjusted to change the relative numbers in each class. The TC will re-examine the classing criteria.
- d. There were differing perceptions of marking policy for TP1: one of the lecturers believed that the aim was a mark distribution which would strongly discourage the weaker candidates from also offering TP2. It was confirmed that this was not Departmental policy, and that while the existence of a long tail was to be expected, the marks should conform to the Departmental policy on marking and classing. Guidance to students on offering TP1 and TP2 should be provided by Directors of Studies. The Blue Book will contain an appropriate “Health warning”.
- e. The external examiners had again raised the issue regarding the fact that they do not have sight of the TP1 and TP2 papers before the test (since TP1 and TP2 are “Further Work”). This matter to be discussed at the TC meeting on Friday.

5. Part III. Reviewed by Prof Haniff. [Appendix 4]

- a. The Advanced Quantum Field Theory marks arrive very late, due to the fact that this exam is taken after all the other Part III examinations, including the General Paper. This had left little time to deal with an unsatisfactory marks distribution.
- b. Moore’s algorithm corrections had been applied to all courses. The factors for most minor options were small, but in some cases larger corrections were required. Some newly appointed lecturing staff (acting as assessors) are not yet calibrated as to what they can expect of the students, but should rapidly improve.
- c. The Senior had checked all the marks himself. He originally believed that this would be unnecessary but nevertheless found several errors. It is not clear how best to provide assistance in this necessary process, given that Examiners retain ultimate responsibility for the correctness of the class list.
- d. The range of marks for the Entrepreneurship option was very small, as it was for the Long Vacation project. It was not clear whether this was important.
- e. The practice of feeding back indicative grades on Major Options was questioned. The primary reason for doing this is to inform students who are deciding whether to take AQFT following the QFT exam. The TC will consider how best to proceed.
- f. Some comments from the External Examiners were:
  - i. There should be a hurdle for those wishing to take Advanced Quantum Field Theory course. Staff felt that this was unnecessary, and that DoSs should advise. The Department will provide clear guidelines in the Course Guide.

- ii. There appeared to be an overlap between the material in the QFT and GFT courses, which might be thought to give students taking both an advantage. Professor Webber explained that the overlap was in fact minimal.
  - iii. Can the Department provide standard spreadsheets for recording of marks? (This item was raised by both externals, for both Parts II and III).
  - iv. It would be desirable to include a substantial fraction of “core” material in Part III.
6. Matters for consideration by the Teaching Committee
- a. (2a) Can we cease using Head of Class moderation for Part IA practicals?
  - b. (3a) Should the TC take “ownership” of the rubrics? (In consultation with Seniors)
  - c. (3d) Can the TC draft guidelines on marking of short notes and essays, which would apply across all years?
  - d. (4c) Should the TC revise the Marking and Classing criteria to make clear that a substantial fraction (or majority?) of the work should be at the indicated level?
  - e. (4e) How best to ensure that TP1 and TP2 papers are seen by the External Examiners?
  - f. (5c) How best to provide support for Senior Examiners through the Teaching Office.
  - g. (5e) Policy on feedback of indicative grades for Part III Major Options
  - h. (5f) Response to External Examiners.

*HMM/RP 14-July-2008*