

EXTERNAL EXAMINER REPORT FORM 2019

External examiner name:	Richard Jozsa		
External examiner home institution:	University of Cambridge		
Course(s) examined:	Part C in: Mathematics (including OMMS), Mathematics and Statistics, Mathematics and Computer Science.		
Level: (please delete as appropriate)	Undergraduate		

Please complete both Parts A and B.

Part A					
		<i>Please (✓) as applicable*</i>	Yes	No	N/A / Other
A1.	Are the academic standards and the achievements of students comparable with those in other UK higher education institutions of which you have experience?		✓		
A2.	Do the threshold standards for the programme appropriately reflect the frameworks for higher education qualifications and any applicable subject benchmark statement? <i>[Please refer to paragraph 6 of the Guidelines for External Examiner Reports].</i>		✓		
A3.	Does the assessment process measure student achievement rigorously and fairly against the intended outcomes of the programme(s)?		✓		
A4.	Is the assessment process conducted in line with the University's policies and regulations?		✓		
A5.	Did you receive sufficient information and evidence in a timely manner to be able to carry out the role of External Examiner effectively?		✓		
A6.	Did you receive a written response to your previous report?				✓
A7.	Are you satisfied that comments in your previous report have been properly considered, and where applicable, acted upon?				✓
<p>* If you answer "No" to any question, you should provide further comments when you complete Part B. Further comments may also be given in Part B, if desired, if you answer "Yes" or "N/A / Other".</p>					

Part B

B1. Academic standards

- a. How do academic standards achieved by the students compare with those achieved by students at other higher education institutions of which you have experience?*

Academic standards in Part C Mathematics and OMMS compare well with those in Part III Mathematics in Cambridge (my home institution) both in the excellent breadth of courses available and the advanced level of material in them.

- b. Please comment on student performance and achievement across the relevant programmes or parts of programmes and with reference to academic standards and student performance of other higher education institutions of which you have experience (those examining in joint schools are particularly asked to comment on their subject in relation to the whole award).*

Careful and thorough consideration was given to performance of the various cohorts (M4 Maths, OMMS, Maths with Stats, Maths with CS, with their differing backgrounds) that all took the same set of Maths exams, to provide an as fair as possible assessment of achievements. OMMS was new this year, and these students were treated with different criteria from those the M4 students. The relative treatment of M4 vs. OMMS could be further considered, with the benefit of this year's experience and outcome statistics e.g. in Cambridge Part III Mathematics the corresponding cohorts are treated identically.

B2. Rigour and conduct of the assessment process

Please comment on the rigour and conduct of the assessment process, including whether it ensures equity of treatment for students, and whether it has been conducted fairly and within the University's regulations and guidance.

As far as I could tell, the assessment process was conducted with a high level of fairness, rigour and adherence to regulations, and with the more subjective ingredients (such as consideration of mitigating circumstances, late submissions etc) being given careful and considerate attention.

B3. Issues

Are there any issues which you feel should be brought to the attention of supervising committees in the faculty/department, division or wider University?

During the final examination board meeting, much time, effort and consideration was given to each course in turn, to determine the way in which marks were to be rescaled, for both performance within the course and to seek to achieve a reasonable credit uniformity comparatively across all courses. The starting point "guess" for the piecewise linear rescaling formula was determined by the previous year's performance of M4 students on the course, mapping them to their previous year's average grade. Since these were all firsts or 2:1s, it meant that essentially every course required further delicate attention for consideration/resolution in its lower end mark range. The course assessors are given the opportunity to give their suggestions for grade boundaries, based on their detailed knowledge of the specific paper, its hardness and student performance on it, but some gave little or no such information, making the task of the panel especially difficult in these cases. I suggest that it would be of much benefit here if it were made compulsory (not optional as at present) for all assessors to declare their estimates of all grade boundaries within the raw marks they provide, with brief reasons.

B4. Good practice and enhancement opportunities

*Please comment/provide recommendations on any **good practice and innovation relating to learning, teaching and assessment**, and any **opportunities to enhance the quality of the***

learning opportunities provided to students that should be noted and disseminated more widely as appropriate.

No further comments here, beyond the above.

B5. Any other comments

Please provide any other comments you may have about any aspect of the examination process. Please also use this space to address any issues specifically required by any applicable professional body. If your term of office is now concluded, please provide an overview here.

Overall I'm very happy with the thorough and detailed consideration applied in the conduct of all aspects of the examination process and the level of fairness and quality assurance achieved.

Signed:	Richard Jozsa
Date:	8 July 2019

Please ensure you have completed parts A & B, and email your completed form to: external-examiners@admin.ox.ac.uk and copy it to the applicable divisional contact set out in the guidelines.