

## EXTERNAL EXAMINER REPORT FORM 2017

External examiner name:	Martyn Quick		
External examiner home institution:	University of St Andrews		
Course examined:	Mathematics, Part A		
Level: (please delete as appropriate)	Undergraduate	Postgraduate	

# Please complete both Parts A and B.

Part A					
	Please ( $\checkmark$ ) as applicable*	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?	1			
A2.	Do the threshold standards for the programme appropriately reflect the frameworks for higher education qualifications and any applicable subject benchmark statement? [Please refer to paragraph 6 of the Guidelines for External Examiner Reports].	<ul> <li></li> </ul>			
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?	1			
A5.	Did you receive sufficient information and evidence in a timely manner to be able to carry out the role of External Examiner effectively?	1			
A6.	Did you receive a written response to your previous report?	1			
A7.	Are you satisfied that comments in your previous report have been properly considered, and where applicable, acted upon?	1			
* If you answer "No" to any question, please provide further comments in Part B. Further comments may also be given in Part B, if desired, if you answer "Yes" or "N/A / Other".					

### 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?

The academic standards achieved by undergraduates in Part A exams at the University of Oxford are very high. I have no doubts that their achievements would rate highly at all other UK institutions with which I am familiar. A broad range of mathematics is covered at this level: the papers cover both standard methods required later in the students' studies together with the opportunity to begin study of topics of a more specialized nature. The material covered at this level will prepare them well for their next year of study which will, by its nature, be more specialist.

b. Please comment on student performance and achievement across the relevant programmes or parts of programmes (those examining in joint schools are particularly asked to comment on their subject in relation to the whole award).

Student performances are in general very good. During my visit to Oxford for the Examiners' Meeting, I spent time looking particularly carefully at scripts of students on the First / Upper Second Class and at the Upper Second / Lower Secord border. At the former, students are performing well and demonstrate good understanding of the material covered. In many cases, one can see the students producing excellent solutions that (almost) fully address what is asked of them. At the lower border, students still manage to demonstrate good understanding of some of the material and typically struggle a little more in applying the mathematics they have learnt to some of the unseen problems set. In view of time constraints, I did not have the time to look in detail at the very top students who far exceed the First / Upper Second boundary, but from the marks list it is clear that these are truly able. There are relatively few students performing at a Third Class level, but even these demonstrated some knowledge of the standard parts of the courses but typically omitted attempts to the non-standard parts of questions.

#### 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.

The entire examining process has been implemented carefully and rigorously. The initial batches of examinations were generally of an appropriate level and, from what I saw of the final papers, my comments on these drafts were seriously considered and responded to. I inspected a large number of scripts during my visit to Oxford and saw evidence of careful marking. The final Examiners' Meeting paid particular attention to borderlines and came to what I felt were sensible and appropriate conclusions.

#### **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?

I have no significant issues to raise. I have a small number of minor points that I will list, all of which were mentioned during the Examiners' Meeting on 7<sup>th</sup> July.

1. Inspection of drafts of exam papers: The exam papers were mailed to me in batches. The second batch of papers was a little delayed, which I understand was due to a meeting having been itself delayed. As a consequence, this meant that I had somewhat less time to look at those papers than the other batches. I would have preferred a little more time to ease the particular time pressure that I found at that specific point in the process.

2. It was noted that many students performed very well on one of the papers (Paper A4: Integration). Although this is a positive thing, since it shows the high ability of these students,

there was an opinion expressed at the Examiners' Meeting that there needs to be more parts on this paper that provide a greater challenge for the able students. I hope that this can be implemented in the future and I shall endeavour to make it one of the things that I consider when looking at the draft paper next year.

#### **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.

The Examiners' Meeting considered at length the performances on specific questions on the ASO Short Options paper, in particular, the question on Mathematical Biology. Given how we focussed our thoughts, it seems sensible to consider the reason behind these, relatively speaking, poorer performances. In the case of the Mathematical Biology question, it was not clear that it was anything as simple as the question being more challenging than usual. A number of possible other reasons were proposed at the Meeting, but it seems unclear to me – as an outsider – which of these actually explained what had happened, nor what the solution should be. It would be good to investigate the performances on this paper, conducted over a period of years, to ensure that students were able to demonstrate their ability on all topics on this paper as well as on the others.

#### **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.

None.

Signed:	Martyn Quick
Date:	24 <sup>th</sup> July 2017

Please email your completed form to: <u>external-examiners@admin.ox.ac.uk</u>, and copy it to the applicable divisional contact set out in the guidelines.