

Title of Examination(s):		Part A Examinations of the School of Mathematics
External Examiner Details	Title:	Dr
	Name:	Warren Smith
	Position:	Lecturer in Applied Mathematics
	Home Institution:	University of Birmingham

Please complete both Parts A and B.

Part A				
<i>Please (✓) as applicable*</i>		Yes	No	N/A / Other
A1.	Did you receive sufficient information and evidence in a timely manner to be able to carry out the role of External Examiner effectively?	✓		
A2.	Are the academic standards and the achievements of students comparable with those in other UK higher education institutions of which you have experience?	✓		
A3.	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 3(b) of the Guidelines for External Examiner Reports].</i>	✓		
A4.	Does the assessment process measure student achievement rigorously and fairly against the intended outcomes of the programme(s)?	✓		
A5.	Is the assessment process conducted in line with the University's policies and regulations?	✓		
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?	✓		
<i>* 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".</i>				

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?*
- 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).*

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.

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?

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.*

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.

Signature:	W R Smith
Date:	12 July 2016
<p>Please email your completed form (preferably as a word document attachment) to: external-examiners@admin.ox.ac.uk and copied to the applicable divisional contact.</p> <p>Alternatively, please return a copy by post to: The Vice-Chancellor c/o Catherine Whalley, Head of Education Planning & Quality Review, Education Policy Support, University Offices, Wellington Square, Oxford OX1 2JD.</p>	

School of Mathematics,
The University of Birmingham,
Edgbaston,
Birmingham,
B15 2TT,
UK
Tel: 44 (0)121 4146192
Fax: 44 (0)121 4143389
Email: W.Smith@bham.ac.uk

July 12, 2016

Vice Chancellor,
c/o Catherine Whalley,
University Offices,
Wellington Square,
Oxford OX1 2JD

Dear Vice Chancellor,

This letter contains the second part of my report as the external examiner for Part A Examinations of the School of Mathematics and the School of Mathematics and Philosophy.

First of all, I would like to thank the chairman of the examination board, Dr Knight, the other examiners and the administrative support team for assisting me. My overall assessment is that the Part A Examinations were well organized and well conducted.

B1. Academic standards

- a. The syllabi for Part A are comparable with those offered by the other leading UK Universities. There was a good coverage of the syllabi of Part A in all examinations. The examiners maintained the highest academic standards.
- b. Student achievement was similar to other UK Universities with many excellent scripts ranked in the first class. The performance of the small number of students in the School of Mathematics and Philosophy were similar to those in the School of Mathematics.

B2. Rigour and conduct of the assessment process

The undergraduates sit three core papers, one paper consisting of short

optional courses and five or six papers from a list of Long Options. Detailed marking schemes assist in producing an equitable assessment process throughout the different papers.

Considerable efforts were made to ensure that the students were treated fairly. The examiners took care to ensure that within each question there was a balance of bookwork, seen and new material. As a result, many exams showed a good spread of marks.

A provisional scaling of raw marks to USMs was provided to the external examiners on the day before the Part A examiners' meeting. This scaling was assessed by the detailed scrutiny of the scripts adjacent to the class borderlines. The scaling was modified during the examiners' meeting taking into account this feedback from the scripts.

B3. Issues

It is pleasing that there were no issues to report with the applied mathematics papers this year.

B4. Good practice and enhancement opportunities

As in the previous year, there were numerous examples of good practice: (i) the balance of bookwork, seen and new material within each question; (ii) the careful scrutiny of examination questions; (iii) detailed reports on each examination question; and (iv) the judicious use of scaling maps. The administrative support was also excellent throughout the assessment process.

Two of the applied mathematics papers, A1 core paper and the A10 optional paper, are notable as the scaling was very close to linear. These two courses are working very well.

Yours sincerely,

W. R. Smith