

The Committee of Management for the Natural Sciences Tripos gives notice that with effect from the examinations to be held in 2021 the form of the examination of the following assessments will be:

Part IB

Biochemistry and Molecular Biology

Paper 1 (3-hour exam): Five essay sections (A-E): candidates should answer one essay question from each section. Each section will carry equal marks.

Paper 2 (3-hour exam) will comprise two sections: Section A will comprise short-answer factual questions based on the whole lecture course. Candidates should attempt all questions in Section A, where each question will carry equal marks. Section A will contribute one third of the available marks for Paper 2. Section B will comprise data-handling questions. All questions in Section B should be attempted. Section B will contribute two thirds of the available marks for Paper 2.

Biology of Disease

The papers will be known as 'Biology of Disease (Essay Paper)' and 'Biology of Disease (Practical Paper)'.

The Essay Paper will be worth 65% of the overall mark and the Practical Paper will be worth 35% of the overall mark.

Cell and Developmental Biology

Paper 1: Four essays, candidates should answer at least one question from each of Section A, B and C

Paper 2:

Section A: 2 (out of 5) integrative essay questions

Section B: 8 Short Practical questions - short answer questions relating to the practical part of the course. These might require analysis and interpretation of experimental data and understanding of the methods used to obtain them.

Ecology, Evolution & Conservation

The examination will comprise two 3-hour written papers and a dissertation, which will be the report of a project undertaken during the year. There is no practical examination.

Paper 1 will consist of eight essay questions in total relating to lecture blocks 1-4, split into four sections containing two questions in each (in previous years this paper has consisted of ten essay questions with two questions in a fifth section relating to excursions). Students will be asked to answer four questions, answering no more than one question from each section.

Paper 2 is unchanged and will consist of ten essay questions in total relating to lecture blocks 5-9, split into five sections containing two questions in each. Students will be asked to answer four questions, answering no more than one question from each section.

Evolution & Animal Diversity

Assessed practicals will carry 20 per cent of the total mark, as in previous years. All practicals will be assessed with the exception of the practical run by Dr Matt Wilkinson. Each assessed practical will account for 2.5% of the course marks (with the exception of the 'Moth' practical, which will require one submission that will be worth 5%).

Experimental Psychology

The Faculty Board of Biology gives notice that with effect from the examinations to be held in 2021 the form of the examination of Part IB Experimental Psychology of the Natural Sciences Tripos will be as follows:

Paper 1

The examination will consist of a three-hour written paper, comprising three sections: Section A, Section B, and Section C. The following rubric shall be used:

Within each Section, provide TWO short accounts, and ONE essay. Each short account carries one-sixth of the available marks, and the essay two-thirds of the available marks.

Paper 2

The examination will consist of a three-hour written paper, comprising three sections: Section A, Section B, and Section C. The following rubric shall be used:

Within each Section, provide TWO short accounts, and ONE essay. Each short account carries one-sixth of the available marks, and the essay two-thirds of the available marks.

Written Practical Reports

Students will submit a range of practical reports throughout the academic year, full details of which are provided in the General Guidelines and Arrangements for Written Reports. Reports will be assessed as pass or failure, with one further attempt should the initial report be deemed unsatisfactory. If the revised report is also unsatisfactory, a penalty of 1.5% will be deducted from the final overall mark for the course. Reports that are not submitted will incur a penalty of 1.5% from the final overall mark for the course.

Neurobiology

For paper 1, candidates will be required to answer four essay questions from a choice of ten, covering a range of topics taken from the lecture course.

Paper 2 will consist of two sections, A and B. Section A will contain twelve short-answer questions of equal weight. Both NST and PBS candidates are required to answer all twelve questions.

Section B will contain four questions of equal weight, based on the topics covered by the online practical classes. Note that one, or all these questions, may be divided into two parts.

Pharmacology

Paper PHA/R - records of practical attendance. Candidates will now be expected to submit a three-minute video on a drug research topic.

Physiology

The examination will consist of two Papers. Paper 1 is in two parts. Part A will be a one-hour multiple choice examination comprising questions taken from any aspect of the lecture

component of the course. Candidates will choose the single best answer for each question from five options. One mark will be awarded for the correct answer. An incorrect or absent answer will be awarded zero. Part A will comprise 20% of the final grade. Part B of Paper 1 will be a two-hour essay paper. Candidates will write three essays from a choice of no fewer than 6 topics. Part B will comprise 50% of the final grade. Paper 2 is a one hour and forty-minute multiple choice examination comprising questions taken from the histology and practical components of the course. This paper will also include a selection of data handling questions. The data handling questions will require the candidate to perform calculations related to material contained within the lecture and practical components of the course. All questions in Paper 2 will require the candidate to choose the single best answer for each question from five options. An incorrect or absent answer will be awarded zero. Paper 2 will account for 30% of the final grade.

Plant and Microbial Sciences

The Faculty Board of Biology gives notice that with effect from the examinations to be held in 2021 the form of the examination of Part IB Plant and Microbial Sciences of the Natural Sciences Tripos will be as follows:

Paper 1. Three hours.

Section A. Candidates will attempt a choice of 8 out of 10 short-answer questions offered on the lecture course.

Section B. Candidates will attempt 6 short-answer questions offered on the practical element of the course.

Section C. Candidates will attempt 1 long-answer question on topics from the practical element of the course to assess their data handling and scientific reasoning abilities.

Paper 2. Three hours

Candidates should attempt 3 Section A and B questions, with at least one question from each of Sections A and B. Candidates should attempt 1 question from Section C.

Section A. Essay questions on MT lectures set by individual lecturers.

4 questions offered.

Section B. Essay questions on LT plus remaining ET lectures set by individual lecturers.

5 questions offered. At least 1 must represent ET lecture material.

Section C. Synoptic essay questions set by >1 lecturer in the course to test candidates' abilities to integrate >1 of the lecture blocks.

4 questions offered.

Part II

Biological and Biomedical Sciences

For the Part II BBS Minor Module in Surgical and Radiological Anatomy: the date of submission of the written report based on students' practical session is changed from the last day of Full Lent Term to the last day of Lent Term. This is to provide the students with enough time during Lent Term to contact the clinicians involved and observe the relevant procedures which will inform the writing of their reports.

Biological and Biomedical Sciences, Bioinformatics

The Faculty Board of Biology gives notice that, with effect from the examinations held in Easter Term 2021, the form of examination for the written papers for NST Part II, Biological and Biomedical Sciences, Bioinformatics will be as follows:

Section A will consist of three questions, rather than four as previously.

Section B will consist of five questions, rather than four as previously.

Pharmacology

Each candidate shall offer:

(a) four written papers. Papers 1, 2 and 3 will contain no fewer than 6 questions from which candidates must answer 3. Candidates will have access to Papers 1-3 for 6 hours each and are advised to spend 3 hours writing their answers. Paper 4 will last three hours. Paper 4 will be divided into sections with marks allocated to each. Candidates must answer all questions.

(b) one essay of not more than 2,500 words, excluding footnotes and bibliography, with a lay summary of not more than 500 words;

(c) a report of a research proposal.

Psychology

Paper 1: The General Paper - the examination will consist of an open book 24-hour written paper, consisting of two sections: Section A and Section B. The following rubric shall be used: Answer two questions: one from Section A and one from Section B

Paper 2: Cognitive and Experimental Psychology - the examination will consist of an open book 24-hour written paper consisting of multiple sections. Each section will correspond to a different 8-lecture topic from the course, and there will be as many sections as there are 8-lecture topics. The following rubric will be used: Answer two questions, taking not more than one from a single section.

Paper 3: Behavioural and Cognitive Neuroscience - the examination will consist of an open book 24-hour written paper, consisting of multiple sections. Each section will correspond to a different 8-lecture topic from the course, and there will be as many sections as there are 8-lecture topics. The following rubric will be used: Answer two questions, taking not more than one from a single section.

Psychology, Neuroscience and Behaviour

(a) four written papers of three hours each, with not more than three written papers from the same Department;

(b) a research project, which shall comprise a grant proposal of not more than 4,000 words, excluding abstract (500 words), footnotes, figure legends, tables, bibliography and appendices; and a research dissertation of not more than 4,000 words, excluding abstract (500 words), footnotes, figure legends, tables, bibliography and appendices, both to be submitted by the fifth day of Full Easter Term in which the examination is to be held. The research project shall be on a subject either proposed by the candidate and approved by the Course Organizer, or chosen by the candidate from a list of approved subjects announced by the Course Organizer, not later than the end of August in the year preceding the Examination. Each candidate shall either obtain the approval of the Course Organizer for the

subject proposed or notify the Course Organizer of the subject chosen from the list, not later than the start of Full Michaelmas Term.

Zoology

The Zoology Department has previously required students to complete a Research Project Proposal, in either Michaelmas or Lent Term, comprising 6% of their final mark. As of 2021, this percentage has been adjusted, and will now comprise 8% of their final mark. Students will complete their Research Project Proposal during Michaelmas Term, and be advised to spend no more than 30 hours in total working on their proposal.

Students were previously required to either undertake one two-term project, or two one-term projects (with the second potentially being replaced with an assessed practical examination associated with ZL1), with the project work comprising 24% of their final mark. As of 2021, all students will be required to undertake a single project, with the write up not exceeding 6,000 words (exclusions are detailed in the course handbook). The percentage for this element has been adjusted and will now comprise 22% of their final mark. Students will be advised to spend no more than 120 hours working on their projects.

In summary, as of 2021 final marks will be composed of the following:

1. 64% - four written papers of three hours each;
2. 22% - project work;
3. 6% - presentation of their project work;
4. 8% - research project proposal