Royal College of Pathologists

Examination regulations - 2024

HISTOCOMPATIBILITY AND IMMUNOGENETICS

These regulations must be read in conjunction with the *Regulations and Guidelines – College examinations for Fellowship and Diplomas*.

ENTRY & TRAINING REQUIREMENTS

There is no specific timing for entry to the examination. Candidates should obtain guidance from their training advisor as to when to sit the examination and should apply only when they are ready. Candidates undertaking the HSST curriculum would normally take the Part 1 examination by the end of the second year. Some general guidance is given below, but apart from the sequence in which the examinations can be sat this is not intended to be prescriptive.

Part 1

Training must be comprehensive in both theoretical and applied aspects of the field. Part 1 will normally be taken after a minimum of 3 years training in an approved laboratory.

It is recommended that the training includes at least 2 years of clinical practice in H&I. Most science graduate candidates will have gained HCPC registration and will have undergone at least 5-6 years of training in pre- and post-registration grades

Part 2

Part 1 is a pre-requisite for Part 2 and candidates will not sit the Part 2 Examination until at least 12 months after passing the Part 1 Examination.

For science graduates the Part 2 examination will normally be taken after a minimum of 8 years training following obtaining the degree entry qualification. HCPC registration (or equivalent qualification in another country) is a mandatory requirement.

STRUCTURE AND FORMAT OF THE EXAMINATION

Part 1

The Part 1 written examination consists of a short answer question (SAQ) paper and an essay paper lasting three hours each. The first paper requires written answers to four out of six questions unless otherwise stated, in note or essay format. The second paper comprises 20 SAQ each with several sub-sections, all of which should be answered.

Part 2

The Part 2 examination will comprise a written component and a practical and oral examination, which may be taken in any order.

The written option

a) a PhD thesis. The research work used for the basis of a PhD thesis must be in the field of Histocompatibility and Immunogenetics or examine linked aspects of alloimmunity with a significant Histocompatibility and Immunogenetics component.. The PhD should also be reasonably up to date i.e. the findings must still be relevant. The work should normally have been completed during the FRCPath training period (i.e. post Clinical Scientist registration). Thus a PhD obtained before registration as a Clinical Scientist may not be acceptable for submission. In this situation, an 'update addendum' to the thesis can be submitted together with the older PhD thesis. The update addendum should bring the thesis results and subject matter up to date in the light of current research and publications, and should explain relevance to current histocompatibility and immunogenetics practice, Such an addendum would be expected to be approximately 5000 words with at least 30 references cited.

b) a series of refereed papers

c) a dissertation, which must extensively cover an aspect of histocompatibility and immunogenetics at advanced level. This option should be applicable to those candidates whose PhD thesis subject does not fall within specific areas of histocompatibility and immunogenetics. Candidates choosing this option are strongly advised to seek advice on their chosen subject before proceeding

d) a casebook, which must be a comprehensive work to an advanced level. The casebook should consist of 7-8 cases with a total length, excluding references, in the range 14,000-20,000 words. Cases should be selected to cover the main areas of clinical practice including solid organ and haematopoietic stem cell transplantation, blood transfusion and immunogenetic testing. A clinical audit should also be included as one case. Candidates choosing this option are strongly advised to seek advice on their chosen subjects before proceeding. A Casebook, which must be comprehensive and at an advanced level with individual cases at a level to that expected for publication as a case report in a scientific journal. The casebook should consist of 7 cases with a total length, excluding references, in the range 14,000-20,000 words.

As stipulated in the College Regulations and guidelines for all specialties, Supervisors are required to confirm that the candidate has made a major contribution to the cases and candidates will be expected to make clear their personal

involvement in each case. This will not necessarily be performing the practical work, but candidates will be expected to participate in discussions at Multidisciplinary Meetings taking the lead on the advising on clinical management e.g., selection of unrelated haematopoietic stem cell donors, listing/delisting of unacceptable antigens for solid organ patients.

Candidates choosing this option must submit a 150-300 word abstract for each case outlining the subject area and reasons for selection for approval prior to submission

Cases should comprise

- 2 solid organ transplant
- 2 Haematopoietic Stem Cell transplant
- 1 audit of the application of current clinical or laboratory practice/testing strategies e.g., policy for listing unacceptable antigens for solid organ transplant; correlation of current definition of positive crossmatching results with clinical outcome; outcomes based on current selection criteria for HLA matched platelets. Other options could include troubleshooting an assay that is not performing as expected.
- 1 from Transfusion, Disease or Immunogenetics
- 1 from Service Improvement Project/Research/Innovation Proposal for informing clinical practice

Guidance on service improvement projects can be found at https://www.england.nhs.uk/improvement-hub/wp-content/uploads/sites/44/2011/06/service_improvement_guide_2014.pdf

Examples of H&I specific service improvement projects are referenced below:

- BMJ Open Qual. 2021 Oct;10(4)
- BMJ Open Qual. 2021 Sep;10(3)

The Research proposal should outline a study or innovation that contributes to advancement in knowledge or proposes changes to current testing strategies or technologies. It should include a description of the proposed research to include the background and aim; principal research question(s); an outline project plan and the potential impact of the research/innovation.

The casebooks should include key learning points and where appropriate any changes to personal or laboratory practice.

e) a research thesis completed during study for a professional doctorate. The subject and content of the research project must be approved as relevant to H&I and candidates are strongly advised to seek advice on their project proposal before proceeding if they intend to submit the thesis as a part 2 written option.

Candidates are required to submit the written work within three years of having the proposal approved. Candidates who fail to submit the work within that time will be required to apply for an extension, giving reasons, or submit a new proposal.

The written option does not need to be passed before sitting the Part 2 Practical and Oral examination but candidates must have their proposal approved ahead of sitting the examination.

Practical Examination

The practical examination is held on one day and will concentrate on analytical and interpretive skills along with basic clinical interpretation of H&I data. The practical examination is designed to assess all aspects of clinical H&I laboratory practice including interpretation of HLA typing and HLA antibody identification data, donor selection and assessment of donor compatibility. Case studies and interpretation of laboratory data, together with statistical manipulation, will usually be provided.

Oral Examination

The Part 2 oral is a one-hour examination. 30 minutes is spent discussing three short cases, for which the candidate has 30 minutes to prepare. The remainder of the examination will consist of a number of additional questions that will test scientific knowledge, the ability to apply knowledge in a clinical context and understanding of laboratory organisation and direction.

Candidates who have sat the old format Part 1 examination

All candidates entering Part 2 for the first time will have to take the Part 2 practical and oral examination.

Re-sitting Candidates

Candidates re-sitting the Oral examination only will not be required to take the Part 2 practical examination.

TIMING OF THE EXAMINATIONS

The Part 1 examination is offered once a year in the Autumn sitting. The Part 2 examination is offered once a year in the Spring session.

Examinations Department
The Royal College of Pathologists
November 2023