

ROYAL COLLEGE OF PATHOLOGISTS OF AUSTRALASIA (RCPA)

HAEMATOLOGY EXAMINATIONS

The RCPA Haematology Parts 1 and 2 Examinations are important components of Haematology training for Fellowship of the RCPA whether this be for RCPA single discipline [Haematology] Fellowship training, or Haematology training under the auspices of the Joint Specialist Advisory Committee in Haematology (JSAC Haematology) in conjunction with the Royal Australasian College of Physicians (RACP).

The examining panel includes haematologists from a number of states of Australia and also from New Zealand and who have exposure to current haematopathology practice and whose training/experience includes single discipline [Haematology] RCPA training, RCPA/RACP conjoint training and those with work/training experience outside of Australasia and with significant research experience. Examiners must continue to demonstrate expertise and commitment to training and the examination processes and must be aware of the relevant RCPA policies in relation to RCPA examinations and examiners.

Policies relevant to examination are as follows and are available from the Document Library on the Member's section of the RCPA website:

- Examination Candidates in Need of Consideration for Illness, Accident, Disability or Compassionate Grounds
- Examination Results
- Examinations for Overseas Trained Specialists Incorporating Timing of Part II Examinations
- Plagiarism and Cheating in Exams
- Repeat Examinations
- Retention of Candidate Examination Records
- Viva Examinations

A. HAEMATOLOGY PART 1 EXAMINATION

This examination comprises five separate components which trainees may sit no earlier than in their third year of accredited RCPA training (i.e. third year of a 5 year RCPA single discipline [Haematology] training program, or the second year of a 4 year JSAC Haematology training program). Candidates are identified by candidate number only, for marking purposes, in all examination components except the VIVA examination.

The examination panel, comprising a variety of experienced haematologists from Australasia, contribute to and further develop examination questions/material for consideration of inclusion in the various components of the examination, and these are discussed in teleconferences held in the first 3 - 6 months of the exam cycle year.

1. COMPONENT: WRITTEN EXAMINATION

- (1) Testing Objectives
 - content knowledge from the RCPA Haematology Curriculum
 - written communication skills
 - time management
 - perspective

- (2) Format
 - a three hour, 15 minute examination (195 minutes); no reading time is allocated
 - the usual format comprises four questions, 3 of which are “essay type” and 1 with multiple short answer questions (usually 4).
 - the examination is held in the capital city of most Australian states or other regional examination centres around early June of the examination cycle year.

- (3) Setting
 - in the first three months of the relevant examination cycle year the examining panel submit questions to the Chief Examiner; these are discussed and further developed in teleconference.
 - the four questions chosen are allocated to two examiners per question who further refine the wording of questions and develop a marking scheme which is discussed with the Chief Examiner.
 - Topics are selected from all areas of haematopathology practice, including management and quality assurance issues and new and emerging concepts and technologies.

- (4) Marking
 - examination questions are marked separately by the two examiners allocated to each question according to their agreed and approved marking criteria.
 - each question is marked out of 100 marks, 50% being a pass.
 - the two examiners' marks are averaged to provide a final mark for each question and in the case of an unacceptable discrepancy between the two markers, the question is re-marked by the Chief Examiner.

- (5) Interpretation of Marks
 - candidates are awarded a pass in this component if they pass at least three of the four questions and are not awarded less than 45 marks by three or more of the eight examiners.

- (6) Awarding of an exemption

- an exemption may be awarded for this component (for the following examination cycle only), if the candidate's average mark is 60% or more and he/she has not failed more than one of the four questions.
- (7) Other comments
- the Written Examination questions are posted on the RCPA website after each examination cycle. Candidates are encouraged to write practice answers to these questions and similar, as devised by their supervisor (and other colleagues involved in their training) under timed conditions for marking and feedback by their supervisors.

2. COMPONENT: MORPHOLOGY (SLIDE) EXAMINATION

(1) Testing Objectives

- competence in Haematopathology morphology diagnosis
- written communication skills
- time management
- perspective

(2) Format

- a three hour, 15 minute examination (195 minutes total). No reading time is allocated.
- approximately 15 – 17 cases (about 17 or 18 individual slides) including peripheral blood (PB) and bone marrow (BM) aspirate smears and trephine sections, and on occasions commonly used "special" stains. Whilst the exact combination of these may change slightly, approximately 3 BMA smears, and 2 BM trephine sections have been included in the last few years.
- the material in the examination in general includes a variety of common benign (including reactive) and malignant haematological disorders, acute leukaemias, lymphoproliferative disorders, myeloproliferative disorders, myelodysplasias, plasma cell dyscrasias, haematinic deficiencies, various reactive changes including certain infections (e.g. malaria), quantitative cell changes (including immune and reactive changes), congenital and acquired haemolytic disorders, haemoglobinopathies/thalassaemias, congenital/acquired qualitative cellular changes etc. Examples of common neonatal/paediatric diagnoses/conditions are also included.
- information supplied to the candidates for each case include age and gender of the patient, haemoglobin level, specimen and stain.
- candidates are instructed to write a concise and systematic PB or BM report suitable for provision to the requesting clinician of the case involved.
- this component is generally held in the early part of June of the examination cycle year.

(3) Location

- the examination is held in the capital city of most Australian states or other regional examination centres.

(4) Setting

- the Chief Examiner seeks appropriate morphology material from the examining panel and other colleagues to provide a range of common haematological diagnoses and morphological changes (including adult and paediatric material). See above.
- each slide provided to candidates is checked meticulously to ensure the diagnostic and/or characteristic features are well displayed and stained and that the slide is appropriately labelled; they are presented to each candidate in a labelled box in the order of the paper.
- to ensure that examiners can refer to an individual candidate's slides in the event of any apparent discrepancies in a candidate's answer, the boxes are labelled by the candidate with their examination number
- a "normal" microscope setup slide (not to be reported) is provided to candidates by invigilators to assist microscope setup prior to the examination.
- candidates ordinarily provide their own microscope with which they are familiar; if this is not possible, sufficient prior notification should be made to the RCPA so that alternative arrangements can be made.

(5) Marking

- at least two examiners (including the Chief Examiner), prior to the marking process, agree on the salient morphological/diagnostic features for each slide and the expected standard.

(6) Interpretation of marking

- answers for each case are marked P+, P (Pass), B(Borderline), and F (Fail).
- an overall Pass in this component is awarded for a Pass or better performance in greater than 50% of the slides and failure in no more than 25%.

(7) Awarding of an exemption

- exemptions in this component may be awarded for the Part 1 Morphology (slide) component (for the following examination cycle only) if the candidate achieves a Pass or better in 60% of the slides with less than an aggregate of 20% failures.

(8) Other comments

- candidates are encouraged to provide a systematic summary of the salient cytological or histopathological abnormalities displayed in each case with a summary comment including diagnosis/differential diagnosis and, if appropriate, brief reference to any relevant further investigations or actions.
- trainees should practise timed morphology exercises in their own laboratories and seek feedback from their supervisors and other colleagues involved in their haematopathology training.

3. COMPONENT: "WET" TRANSFUSION PRACTICAL EXAMINATION

(1) Testing Objectives

- competence in performance of standard basic transfusion serology techniques

- competent and accurate interpretation and reporting of results of a practical transfusion exercise, e.g. provision of compatible red cell units
- (2) Format
- a three hour examination (with no allocated reading time) is performed in the candidate's own blood bank laboratory and invigilated by their supervisor. Results are faxed (and subsequently sent) at the end of the examination to the examiner at the RCPA Transfusion Serology Quality Assurance Program (QAP). A duplicate specimen is sent to all candidates' supervisors so that the same exercise can be performed locally by a medical scientist, providing quality control in relation to "specimen integrity" issues.
 - the format is generally along the lines of a RCPA Transfusion Serology QAP exercise.
 - this component is generally held towards the end of June or in early July of the examination cycle year.
- (3) Setting
- the examination is set by the Clinician-in-Charge of the RCPA Transfusion Serology QAP who has expertise in setting QAP exercises; all candidates should be familiar with these from their own laboratory's experience.
 - the content and wording of the examination exercise are discussed with the Chief Examiner before final development and distribution.
- (4) Marking
- the marking scheme is developed by the Clinician-in-Charge of the RCPA Transfusion Serology QAP (as above) and discussed with the Chief Examiner.
 - the answers are marked out of 100.
- (5) Interpretation of Marks
- a Pass is 80%.
- (6) Awarding of an exemption
- all candidates who pass this component are awarded an exemption for the Part 1 "Wet" Transfusion practical component (for the following examination cycle only).
- (7) Other comments
- this component of the examination is retained as part of the Part 1 examination to ensure ongoing involvement by trainees with and competence in practical transfusion serology, a critical area of laboratory haematology practice.

4. COMPONENT: “DRY” PRACTICAL EXAMINATION

(1) Testing Objectives

- content knowledge from the RCPA Haematology Curriculum
- analytical and problem solving skills
- time management

(2) Format

- a three hour, 15 minute (195 minutes in total) examination comprising approximately 10 questions; a minority of questions may have multiple parts which must be completed by the candidate and handed in before proceeding to the next section of the question. No reading time is allocated.
- candidates are advised of the mark values of each question so that they may allocate their time accordingly.
- this is an “open book” examination and candidates can bring reference information to assist with their answers.
- **Candidates CANNOT bring programmable calculators or computers into the examination room.**
- the examination is held in the capital city examination centre where the Part 1 and 2 Haematology VIVA examinations are held (presently Melbourne). This component is generally held in August, the day before the Haematology Part 1 VIVA examination.

(3) Setting

- the Chief Examiner invites submission of topics/exercises from the examiners’ panel for consideration at teleconference and individual members of the examining panel are supported to further develop these exercises to include as questions in the examination.
- topics are chosen from all areas of haematology laboratory practice and generally cover clinical-laboratory liaison skills, data interpretation and reporting, including clinical scenarios with associated blood group/antibody screening, haemoglobin investigations, quality assurance exercises, data analysis, flow cytometry, cytogenetics/FISH, abnormal coagulation/haemostasis investigations etc.

(4) Marking

- a master answer sheet is developed and shared with examiners from the examining panel who mark these papers on the afternoon of the day of the examination.

(5) Interpretation of Marks

- a Pass is 50%.

(6) Exemption

- an exemption may be awarded for this component in the following Part 1 examination cycle only if a candidate’s average mark is at least 60%.

5. THE VIVA EXAMINATION

- (1) Testing Objectives
 - content knowledge from the RCPA Haematology Curriculum (particularly laboratory practice)
 - oral communication skills
- (2) Format
 - this comprises two sequential twenty minute oral examinations with two teams of examiners. Although the examining group may comprise two or three examiners, only two of these examiners examine a candidate in any one session.
 - candidates are not ordinarily directly examined in the VIVA examination by examiners from the state [or country in the case of NZ or non-Australasian candidates] in which the candidate is training.
- (3) Setting
 - the Chief and Associate/Assistant Examiners review the material which has previously been set in the various examination components to identify potential areas not tested and those in which candidates may require further testing.
 - a standardised set of questions covering a broad range of contemporary laboratory technical and management issues is developed.
 - confidentiality is maintained so that sequential groups of candidates can be examined on the same set of questions.
- (4) Marking
 - each examining group predetermine the expected standard required for each question prior to the commencement of the examination and after individual marking, develop a consensus mark of PASS, BORDERLINE or FAIL for each question and for overall performance.
- (5) Interpretation of Marks
 - if a candidate has performed satisfactorily in all previous components of the Part 1 examination, but is felt to be 'borderline' after completion of the VIVA examination, the Chief Examiner, in discussion with the examining panel, can award a third 20 minute oral examination to be conducted by a further set of examiners (including the Chief or Associate/Assistant Chief Examiner where possible) and separate from those who have already examined the candidate in the VIVA examination.
 - for this third oral examination, a separate standardised set of questions is used and a third set of examiners discuss their marks with the examining panel and the Chief Examiner who will then confer a Pass or Fail mark.
- (6) Awarding of an exemption
 - No exemptions are awarded in the Part 1 Haematology VIVA examinations. Should a candidate fail any other component, they must re-present for a further VIVA examination as part of resitting the Part 1 examination. This is considered to be important in assessing maintenance of a wide variety of laboratory skills at the time of completion

of the Part 1 examination cycle, given that this completes the formative examinations in Haematopathology.

(7) Comments

- examiners participating for the first time in this component are teamed with at least one examiner experienced in previous Part 1 VIVA examinations.

B. HAEMATOLOGY PART 2 EXAMINATION

Trainees ordinarily sit the Part 2 examination in their final year of RCPA single discipline [Haematology] or JSAC Haematology (RACP/RCPA) training and no earlier than 12 months after the successful completion of all Part 1 Haematology examination components. All trainees should have successfully completed [or have been exempted from] the RCPA Basic Pathological Sciences examination prior to sitting the Part 2 Haematology examination.

Trainees cannot sit the Parts 1 & 2 examinations in the same year.

Trainees cannot be exempted from sitting the Part 2 examination

1 COMPONENT: DISSERTATION

Candidates are required to submit a 5,000-10,000 word dissertation several weeks prior to the scheduled Part 2 examination which is usually held in the last half of August of the examination cycle year.

The topic/s is/are of the candidate's choice and he/she should discuss the topic selection, planning and performance of this component with his/her supervisor (and Chief Examiner, if necessary).

The format is flexible, recognizing candidates' wide range of activities and interests at this stage of their training and could include for example the preparation of an extensive literature review, a paper/s suitable for publication, audits/projects suitable for presentation at a scientific meeting, guidelines/protocols/procedures developed by the candidate for local implementation or a combination of these. Trainees are encouraged to prepare material suitable for submission for publication where possible.

(1) Testing Objectives

- this component of the Part 2 examination is intended to introduce the trainee to an approach to research, planning and critical analysis of the literature, and to improve written scientific communication skills, etc
- preparation of such material develops a deeper understanding of a particular topic/s and more sophisticated presentation skills than are tested in the Part 1 examination and also promotes justifiable pride and develops professional maturity in the candidates

(2) Format

- three copies of the dissertation are submitted to the RCPA generally in June of the examination cycle year. As mentioned above, the topic/s is/are of the candidate's choice. The body of work should be carried out

by the candidate (and appropriate acknowledgement made of others' contributions)

(3) Marking

- each submitted dissertation is reviewed by two examiners including at least the Chief Examiner and/or the Assistant/Associate Chief Examiner.

(4) Interpretation of Marks

- dissertations are assessed at Pass standard.

(5) Awarding of an exemption from the dissertation

- candidates enrolled in a higher research degree (PhD or MD) during their training may be exempted from the requirement to submit a formal dissertation as above. In these circumstances, the candidate must apply in advance for exemption by providing evidence of enrolment & submission of their research degree project plan at the time of their application to sit the Part 2 examination. At the Part 2 Viva examination the candidate should present evidence of satisfactory progress with their research.

2. COMPONENT : VIVA EXAMINATION

(1) Testing Objectives

- oral communication skills
- reflection on training
- discussion of future career plans

(2) Format

- an approximately 20 minute (or longer) discussion.

(3) Setting

- the candidate discusses his or her dissertation or progress with their research degree and answers questions from two examiners who have had the opportunity to review these previously; the development and content of the dissertation is explored with the candidate.
- the candidate is also encouraged to reflect on and evaluate their training in Haematology particularly as related to Haematopathology and to discuss their immediate future career plans and opportunities and plans for further professional development.
- the Part 2 Viva Haematology examination is held at the state capital city examination centre in which the Part 1 Haematology August examinations are held and ordinarily on the same weekend. For candidates completing their training outside Australasia, application can be made to the RCPA for Part 2 Viva examination assessment by teleconference.

(4) Marking

- candidates submitting a satisfactory dissertation and achieving a satisfactory performance in the Viva examination are awarded a Pass in the Part 2 Haematology examination.

(5) Interpretation of Marks

- if a candidate's dissertation is for some reason unsatisfactory (extremely unusual to date) such a candidate would be required to resit both components of the Part 2 examination.

Operational Aspects

The time and resource demands and responsibilities of all RCPA Haematology examiners, particularly the Chief Examiner, are significant. Every effort is made by examiners and RCPA Management staff to ensure the integrity of the examination process for all candidates and that fairness is upheld and confidentiality maintained at all times.

Dr Merrole Cole-Sinclair
Chief Examiner, Haematology, RCPA

April, 2009