



RADIATION ONCOLOGY PHASE 2 EXAMINATION

OUTLINE OF PHASE 2 EXAMINATIONS

The Phase 2 Examination in Radiation Oncology consists of 2 components:

- written papers; and
- viva voce (oral) examinations (vivas).

The Phase 2 Examination is divided into two domains:

- Radiation Therapy and Clinical Oncology; and
- Pathology

WRITTEN PAPERS

Purpose

The purpose of the written papers is to test candidates' knowledge of the theoretical basis of Radiation Therapy, Clinical Oncology and Pathology.

Questions are short answer questions and many are scenario-based. These questions are designed to test the candidates' knowledge of the subject area as well as the ability to analyse, interpret and synthesise theoretical information.

The written papers assess the competencies of Medical Expert, Communicator and Scholar.

Description and Format

There are four (4) written papers: Radiation Therapy 1, Radiation Therapy 2, Clinical Oncology and Pathology. In each of the written papers, all questions are of equal value.

- Radiation Therapy 1 is a 5-question paper to be completed in 2.5 hours.
- Radiation Therapy 2 is a 5-question paper to be completed in 2.5 hours.
- Clinical Oncology is a 6-question paper to be completed in 3 hours.
- Pathology is a 6-question paper to be completed in 3 hours.

Passing Standards

The examination passing standards for the Radiation Therapy 1 and 2, Clinical Oncology and Pathology written papers are set each year by a panel of examiners using formal standard setting methods. These methods establish a pass score for each individual question on the paper and an overall passing standard for each written paper by combining the pass scores for each individual question. These scores may vary between series to account for differences in examination difficulty.

A minimum pass score may be obtained by applying an error width around the passing standards. Candidates who reach the minimum pass score but do not reach the passing standard are granted a **Pass**.

The requirement to pass includes achieving the minimum pass score, as well as achieving the passing score for the minimum number of questions on each component.

In determining the passing standards for Radiation Therapy written papers, papers 1 and 2 are combined to make a total of ten (10) questions.

To pass each paper, candidates must achieve the minimum pass score for each domain of Radiation Therapy, Clinical Oncology and Pathology, and in addition to the passing score, must pass a minimum number of questions on each paper. These are set at:

- at least 7 out of 10 (7/10) questions for Radiation Therapy 1 and 2,
- at least 4 out of 6 (4/6) questions for the Clinical Oncology paper, and
- at least 4 out of 6 (4/6) questions for Pathology.

Marking of the Written Papers

The Radiation Oncology Education and Training Committee has approved a systematic approach to marking of the written papers. All questions are marked by two examiners. Minor discrepancies in marks are resolved through the application of marking rules.

Where there are large discrepancies in marks, the question is re-marked by either the Chief of Examinations or by a third Examiner. The final mark for the question is determined through the application of marking rules.

VIVA VOCE EXAMINATIONS

Purpose

The viva voce (oral) examinations (vivas) include examinations in Radiation Therapy/Clinical Oncology and Pathology. The Radiation Therapy/Clinical Oncology domain includes a planning exam and clinical cases (prompt and patient based). The Pathology domain includes one Pathology viva.

The vivas are designed to test a range of competencies across the roles of Medical Expert, Communicator and Scholar.

Description and Format

Planning Exam

Purpose

The planning exam is designed to assess the candidate's knowledge of treatment planning equipment and theory as well as the ability to:

- Evaluate treatment planning information
- Compare treatment plans and choose the most appropriate plan for the individual case

Format

Candidates are presented with a prompt comprising a photograph of a clinical case, a piece of equipment, a specific technique and/or a radiation therapy treatment plan. Candidates are asked a series of questions in relation to the prompt.

The planning exam is a 30 minute examination and comprises:

- 1 long question of 9 minutes, and
- 6 short questions of 3 minutes each.

Clinical Cases

Purpose

The clinical cases are designed to assess the candidate's knowledge of:

- The particular cancer topic in the case
- Treatment techniques for specific cancers
- The current evidence base in relation to the topic (such as clinical trials)
- General and oncological management of the case
- Chemotherapy and drug treatment options relating to the case including adjuvant chemotherapy
- Palliative treatment of the particular cancer

The clinical cases are designed to assess a range of competencies including the ability to:

- Conduct an appropriate semi-directed examination of a patient and elicit physical signs
- Evaluate clinical information
- Integrate, interpret, analyse and synthesise theoretical and clinical knowledge and apply this to a particular clinical case.
- Interact professionally and appropriately with patients

Format

The clinical cases are a mix of cases either conducted with a real patient or a clinical prompt:

The clinical cases comprise:

- 8 clinical cases of 6 minutes each
 - The case mix (between patients and prompts) is at the discretion of the Chief of Examinations according to the patient cases available in the hospital and the assessment blueprint
 - The case mix will include a minimum of 2 patient cases, one of which will be a physical examination patient case

Patient Cases

The cases conducted with patients represent a brief interaction with a real patient usually followed by a discussion with colleagues. These cases may focus on one or both elements of patient assessment and/or management:

- *Management of a particular cancer topic in reference to the individual patient*

The Examiners introduce the patient with a short description of the presenting problem and the candidate is invited to conduct a restricted/localised physical examination of the patient. The Examiners and candidate usually then leave the room together and conduct the viva examination away from the patient. This examination consists of a series of questions put to the candidate. These may include presentation of additional information (such as results of investigations) as well as scenarios based on aspects of the case.

- *Physical Examination Case*

The Examiners give a brief introduction to the clinical scenario e.g. presenting problem. They invite the candidate to conduct a physical examination restricted to a particular region or system e.g. neck or cranial nerve examination, reporting their findings as they proceed. The entire 6 minute case may be spent in the clinic room with the patient while the examiners assess the candidates' skills in the interaction with the patient, in particular their physical examination skills. If the main focus of the case is physical examination technique, then the candidate will be informed of this prior to the commencement of the case.

Prompt Cases

The prompt cases consist of the Examiners presenting a prompt of case-related material, such as radiological imaging or clinical photographs, and asking the candidate a series of questions in relation to the case. These might be related to the case in question specifically, or to the condition more generally. These may also include presentation of further case related material or scenario-based questions.

Pathology

Purpose

The Pathology viva is designed to assess the candidate's knowledge of clinical Pathology as it relates to the practice of Radiation Oncology.

The Pathology viva is designed to assess a range of competencies including the ability to:

- Describe the macroscopic appearance of specimens
- Integrate, interpret, analyse and synthesise theoretical and clinically relevant pathology knowledge

Format

Candidates are asked a series of questions in relation to the prompt. These might be related to the case in question specifically, or to the condition more generally. These may also include presentation of further case related material or scenario-based questions.

The pathology viva exam is a 30 minute examination and comprises:

- 6 prompt (clinical photograph) cases of 5 minutes each

Passing Standards

The passing standard for the Radiation Therapy/Clinical Oncology domain is a Pass in the planning exam *and* a Pass in the clinical cases.

The passing standard for the Pathology domain is a Pass in the Pathology viva.

These are set at:

- at least 5 out of 7 (5/7) questions in the planning exam.
- at least 6 out of 8 (6/8) cases in the clinical cases.
- at least 4 out of 6 (4/6) cases for the pathology viva.

OVERALL RULES FOR PASSING THE PHASE 2 EXAMINATIONS

In order to pass the Phase 2 Examination overall, a candidate must pass in both domains: *Radiation Therapy and Clinical Oncology* and *Pathology*.

- In order to pass Radiation Therapy and Clinical Oncology overall, the Candidate must pass the written papers *and* the viva examinations in Radiation Therapy and Clinical Oncology in a single exam series.
- In order to pass Pathology overall, the Candidate must pass the written papers *and* the viva examination in Pathology in a single exam series.

Candidates who attempt all components of the Phase 2 Examination and pass Radiation Therapy and Clinical Oncology overall, but fail Pathology overall, will be allowed to carry this pass as credit until the next Phase 2 Examination series. At the next Phase 2 Examination series, the candidate is required to sit Pathology components only and will be exempt from sitting Radiation Therapy and Clinical Oncology.

Candidates who attempt all components of the Phase 2 Examination and pass Pathology overall, but fail Radiation Therapy and Clinical Oncology overall, will be allowed to carry this pass as credit until the next Phase 2 Examination series. At the next Phase 2 Examination series, the candidate is required to sit Radiation Therapy and Clinical Oncology components only and will be exempt from sitting Pathology.

In both of the instances described above:

- if the candidate does not sit at the next Phase 2 Examination series the exemption in either Radiation Therapy and Clinical Oncology or Pathology is forfeited and will not apply at any subsequent Phase 2 Examination series; OR
- If the candidate sits, and fails, the candidate will be required to sit all examination components Radiation Therapy and Clinical Oncology and Pathology at their next attempt.