



**Preparation Guide for the Membership Exam of the
Canadian College of Physicists in Medicine**

October 1, 2013

Updated February 6th 2016

Introduction

This guide is intended to assist candidates in preparing to take the Membership exam. The Membership exam is delivered in two parts: the first part is a 5 hour written exam after which, if the candidate is successful, is followed by an oral exam approximately 2 months later. Although this document provides some guidance to candidates, it is not meant as a single definitive source of preparation. Every candidate needs to tailor their preparation for their own needs and experience, accounting for how they best prepare for exams of this nature. To be explicit, this is not meant as a prescriptive document but as general advice!

Written exam

Parts I and II

The written exam focuses mainly on probing the candidate's factual knowledge of medical physics, both generally and more specifically to their sub-specialty. It is helpful to understand the format of the exam since this will impact preparation. The first two parts (Parts I and II) are multiple choice style questions*. The candidate does not know these questions ahead of time, and therefore broad reading is needed. A suggested reading syllabus is provided for Part I (general medical physics – all subspecialties) and Part II (radiation safety or magnetic resonance imaging safety, depending on the subspecialty). This type of reading should begin well ahead (i.e. several months) of the exam date. As previously mentioned, candidates from all the subspecialties write the same exam for Part I. Expect basic questions from each subspecialty: diagnostic imaging (DI), magnetic resonance imaging (MRI), nuclear medicine (NM), and radiation oncology (RO). During the exam, the candidate should **keep track of his/her time**, ensuring that he/she will be able to attempt all the questions.

Parts III and IV

Parts III and IV are comprised of written, long answer style questions and are available to the candidate on the CCPM website (www.ccpm.ca) around October 1st. These questions are largely the same from year to year, but there may be wording changes in some questions, or questions added/removed. The candidate should ensure that he/she has the latest version of the question set. The question sets (all subspecialties) for Parts III and IV consists of many questions and therefore the candidate should begin preparing his/her answers many months before the exam date. During the exam the candidates should provide a detailed answer to the question in the given amount of time. About two pages of writing per question is expected, but this can vary with writing size and page space usage. The candidate should solicit the feedback of an experienced medical physicist colleague to review their written answers well before the exam date to maximize accuracy and completeness. The medical physics community in Canada is small and collegial, and most medical physicists will try to help out someone preparing for certification

*Note, this is true for the Radiation Oncology, Diagnostic Imaging, and Nuclear Medicine subspecialties. For the Magnetic Resonance Imaging subspecialty, Part I is comprised of multiple choice style questions while Part II is short answer questions.

(whether directly or by helping them find someone who has time to help). During the Parts III and IV written exam the candidate will need to answer only a few questions (8-10) selected from the entire question bank (80-100 questions). Having answers prepared to all the questions ahead of time, and having practiced writing them quickly, will increase the chances of success on the exam.

Time Management: Since Parts III and IV of the written exam are, by nature, time-limited, it is crucial that the candidate properly manage their time during the exam. By calculating the average time available per question the candidate should be aware of the amount of time they can allot per question and actively monitor this during the exam. Currently this corresponds to 15 minutes per question for Parts III and IV for the RO, DI, and NM subspecialties (while the MRI subspecialty is about 19 minutes per question). Again, practicing writing the answers during the appropriate, fixed amount of time has been found to be helpful by many past candidates. Answers in point form as opposed to full grammatically correct sentences are acceptable, as long as they are coherent and legible. Having all his/her answers prepared will also help the candidate towards conveying the maximum amount of information (and therefore obtain the most marks) in the time available.

Hand writing: The exams are copied or scanned and sent to the correctors. Writing must be legible. If a corrector cannot read your writing, then a mark of 0 is assigned to that section. Write on only one side of the Answer sheets. Do practice writing ahead of the exam. Candidates in the past have suffered cramps in their hand during the exam due to lack of practice.

Oral Exam

Roughly 3-4 weeks after the written exam, candidates will receive their exam result. The successful candidate will be informed that he/she can take the oral exam about 4-5 weeks later. A panel of certified medical physicists will act as examiners. The oral exam focuses on clinical medical physics knowledge in the candidate's subspecialty area. The exam lasts 90 minutes and consists of three individual sessions of about 25 minutes each with a 5 minute transition time between sessions. During each session, 4-6 questions will be asked on topics chosen according to the candidate's subspecialty. Currently for radiation oncology exams, the topics are: Equipment & Calibration, Clinical Applications, and Radiation Safety/Special Techniques. For diagnostic imaging exams they are QA/Acceptance Testing/Site Planning, Clinical Applications, and Radiation Safety/Special Techniques. For nuclear medicine exams they are QA/Instrumentation, Clinical Applications/Special Techniques, and Radiation Safety/Special Techniques. For magnetic resonance imaging exams, they are QA/Acceptance Testing/Site Planning/Artifacts, Clinical Applications/Special Techniques, and MR Safety. These topics may evolve over time to reflect clinical practice and they will be confirmed with the candidates before the oral exam.

Many previous candidates have found that holding mock (i.e. practice) oral exams with colleagues has proven helpful in preparing for the actual oral exam. These mock exams help the candidate better manage high stress situations as well as improve their communication skills. A successful candidate will answer questions thoughtfully, in an organized manner, and will focus on the question rather than ramble on. As with the written exam, time is also a constraint.

Written by Boyd McCurdy
Updated by Renée Larouche