



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

October 1st, 2013
Updated October 1st, 2021

Introduction

This guide is intended to assist candidates in preparing for the Membership exam. The Membership exam is delivered in two parts: a 5 hour written exam followed by an oral exam. Only the candidates having successfully completed the written exam are eligible to take the oral exam.

Although this document provides 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. 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 questions¹. Candidates from all the subspecialties write the same exam for Part I. Expect general medical physics questions and basic questions from diagnostic imaging (DI), magnetic resonance imaging (MRI), nuclear medicine (NM), and radiation oncology (RO). Part II of the exam has one version specific to Radiation Oncology Physics, Nuclear Medicine Physics and Diagnostic Radiology Physics addressing radiation safety and a second version specific to Magnetic Resonance Imaging Physics addressing magnetic resonance imaging safety. 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. During the exam the candidates should keep track of their time, ensuring that they will be able to attempt all 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) after October 1st. These questions are largely the same from year to year, but there may be wording changes in some questions, or questions

¹ 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.



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added/removed. The candidates should ensure that they have the latest version of the question set. The question sets consist of many questions and therefore the candidates should begin preparing the questions many months before the exam date. The candidate is allowed to solicit the help and feedback of experienced medical physicist colleagues to discuss their written answer well before the exam date to maximize accuracy and completeness. During the part III and IV of the written exam the candidate will need to answer only a few questions (around 5 per section) selected from the entire question bank. During the exam the candidates are expected to provide detailed answers to the questions (as a guide about two pages of writing per question is expected, but this can vary with writing size and page space usage).

Since Parts III and IV of the written exam are time-limited it is crucial to properly manage time during the exam. Having answers prepared to all the questions ahead of time and having practiced writing them quickly, will help the candidate convey the maximum amount of information and increase chances of success on the exam. Answers in point form as opposed to full grammatically correct sentences are acceptable, as long as they are coherent.

Note that 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.

Oral exam

Successful candidates to the written exam will be informed that they can take the oral exam (the oral exam usually takes place about two months after the written exam). 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 30 minutes each. The panel of examiners is composed of experienced certified medical physicists. During each session, about 5 questions will be asked on topics chosen according to the candidate's subspecialty. The current list of topics for the different subspecialty can be found in the table below. These topics may evolve over time to reflect clinical practice and will be confirmed with the candidates before the oral exam.

Successful candidates are required to answer questions thoughtfully, in an organized manner. It is important to focus the answer on the question that was asked rather than ramble on. Note that time is also a constraint and that the candidates must be able to convey a complete answer succinctly.



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Although oral exam questions are confidential and past candidates are required not to share exam questions, candidates are allowed and encouraged to hold practice oral exams with colleagues. These mock exams can help the candidate to better manage high stress situations as well as improve their communication skills.

<i>Radiation Oncology</i>	<i>Diagnostic Imaging</i>	<i>Nuclear Medicine</i>	<i>Magnetic Resonance Imaging</i>
Equipment and Calibration	QA/Acceptance Testing/Site Planning	QA/Instrumentation	QA/Acceptance Testing/Site Planning/Artifacts
Clinical Applications	Clinical Applications	Clinical Applications/Special Techniques	Clinical Application/Special Techniques
Radiation Safety/Special Techniques	Radiation Safety/Special Techniques	Radiation Safety/Special Techniques	MR Safety

Table 1: Summary of the topics covered for the different subspecialties