

Resident Physicist Examination System

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Current HKAMP Certification system

- * System was established in 2005.
- * Part I multiple-choice questions (“MCQ”) written examination: focused on the basic principles and concepts of a broad spectrum of medical physics.
- * Part II oral examination: focused on one of the specialties below:
 - * Radiotherapy Physics
 - * Imaging Physics
 - * Engineering Physics
 - * Health Physics

Current HKAMP Certification system

- * Part III (Professional Assessment): to assess the applicant's competency to practice independently, from planning to execution, in a particular specialty of medical physics.
- * Candidates will be certified on the particular specialty after passing Part III.

	Candidates since inception of examination system
Part I Written Examination	78
Part II Oral Examination	51
Part III Oral Examination	27

The Examination System will adopt
some changes after IMPCB
accreditation

IMPCB (International Medical Physics Certification Board)

- * The International Medical Physics Certification Board (IMPCB) was formed on 23rd May 2010 by eleven Charter Member Organizations in medical physics. One of the objectives is:
 - * to establish the infrastructure, requirements and assessment procedures for the accreditation of medical physics certification programs in accordance with the requirements of IOMP guidelines;

IOMP (International Organization for Medical Physics)

- * IOMP was formed in January 1963. The Organization has a membership of over 80 national member organizations and 6 regional organizations.
- * IOMP is charged with a mission to:
 - * advance medical physics practice worldwide by disseminating scientific and technical information.
 - * foster the educational and professional development of medical physics.
 - * promote the highest quality medical services for patients.
- * **IOMP is collaborating with professional organizations in development of a professional certification system for medical physicists that can be implemented on a global basis.**



The reason to seek accreditation...

- * To maintain a better professional standing and international recognition by an international accreditation body.
- * Continuous evaluation and quality audit by the IMPCB that keeps our certification system up to international standard.

IMPCB accreditation

- * HKAMP submitted an application in December 2015 to the IMPCB (International Medical Physics Certification Board) for the accreditation of the certification system.
- * Accreditation was granted in Apr 2018, on 3 specialties (Radiotherapy Physics, Imaging Physics, Health Physics).
- * Several changes were agreed to be made to the current system, so as to conform to IMPCB requirement.

Changes to Part II Examination

- * **Written examination Part IIA (90 mins): 5 questions, carrying equal score weighting**, to test theoretical knowledge, calculations, problem solving, etc. The examination will be held approximately 3 weeks before oral examination Part IIB.
- * **Oral examination Part IIB (90 mins):** format will be similar to the existing oral examination, with more focus on logbook and questions related to professionalism and scenario handling. The examination board is still consisted of 3 local examiners and 1 external examiner.
- * Candidates are considered to have passed the Part II after they have passed the Part IIA AND Part IIB. Candidates have to pass Part IIA before attempting PART IIB.

	Full score	Passing score for individual part	Overall passing score
Written examination Part IIA	50	25	-
Oral examination Part IIB	50	25	-
TOTAL	100	-	60

- * To be implemented in 8-9 Mar 2019 (Fri & Sat).

Changes to Part II Examination

- * The examination fee for the new Part II will be the same as before (\$3,000), which include 1 Part IIA and 1 Part IIB attempt.
- * Fee for retaking Part IIA or Part IIB will be \$1,500.
- * Candidates passing Part IIA may carry the result to Part IIB Exams in subsequent years.
 - * E.g. if he/she passes Part IIA, but fails Part IIB (same specialty), he/she needs only to retake the Part IIB in the next year.
- * If the candidate passes Part IIA and fails Part IIB, he/she can choose whether or not to retake Part IIA in the subsequent year. The result of the most recent attempt will be counted in the final result of Part II.
- * Maximum attempts for each of Part IIA and Part IIB: 3.

New Part I Exam

- * A separate section for 'Common Core' will be added to the Part I Examination, covering the following aspects:
 - * **Basic Physics:**
 - * Classical and Relativistic Mechanics
 - * Electricity and Magnetism
 - * Optics
 - * Physics of Fluids and Gases
 - * Quantum Mechanics
 - * Solid State Physics
 - * Thermodynamics and Statistical Physics
 - * **Atomic and nuclear physics**
 - * **Production of X-rays**
 - * **Interaction of ionizing radiation with matter**
 - * **Radiation detectors and instrumentation**
 - * **Measurement of ionizing radiation**
 - * **Statistics**
 - * **Introduction to Human Anatomy and Physiology**

- * Tentatively the revision will be implemented in 2020.