ABHP Reengineers the Part II Certification Exam

Edward F. Maher, Sc.D., CHP
Chair, American Board of Health Physics

On 6 September 2000, the American Board of Health Physics (ABHP) approved several motions that will transition Part II of the ABHP Certification Exam from an essay question format to one that is a completely machine-scored question (MSQ) format. This unprecedented action represents the first major reengineering of the Part II exam in more than 30 years.

The decision to reengineer the Part II exam followed a comprehensive review of practices and procedures used by similar certification boards and historical trends in the Part II examination process. The Board expects that the reengineering process and associated exam format change will require at least three years to implement.

The MSQ format will be a mixture of type A, K, M, and S questions (types of serial-multiple choice questions). The MSQ format is expected to improve year-to-year pass-rate consistency, reduce exam preparation resource requirements, reduce exam grading time, and provide an accurate a priori validation of individual question and overall test performance.

These changes are aligned with the Board’s current application for accreditation by the Council of Engineering and Scientific Specialty Boards (CESB). The CESB accreditation criteria require that the certifying board’s exam process is fair and reasonable and utilizes testing methods that are reliable, predictable, and validated on an a priori basis.

The exam reengineering effort began over 18 months ago to support Goal #1.3 of the American Academy of Health Physics’s Strategic Plan, which states: “Maintain consistent, relevant, and high-quality certification examinations that faithfully evaluate the candidate’s ability to practice Health Physics.”

The ABHP is in the process of appointing an ad hoc Part II Panel of Examiners to construct a closed question bank for the new Part II exam format. The ad hoc Panel will use the findings of the recent Job Task Analysis (JTA) questionnaire conducted by the Board’s testing service consultant, Credentialing Services Inc., that defined the rubrics of the question bank. The JTA step was completed this summer to ensure the exam continues to be representative of professional health physics practice.

The ad hoc Part II Panel’s job will be to populate the question bank with at least 500 questions that are validated and pretested. The question bank must also reflect and represent all health physics work areas and skills identified by the JTA in proportion to their frequency and importance to health physics. The Board estimates that the ad hoc Part II Panel will probably need about three years to complete all these goals. Until such time, the regular Part II Panel of Examiners will continue to administer the Part II exam under the existing procedures, policies, and exam format until the Board is ready to test the new MSQ format.

Academy members are urged to help support this effort by submitting draft MSQs of the types mentioned herein. In turn, the Academy will award the author with recertification CECs. The ad hoc Part II Panel membership will be announced in an upcoming Newsletter article. Academy members who draft Part II MSQs should submit their questions to one of the ad hoc Panel members assigned to that specialty area, for example, internal dosimetry, power reactor, instrumentation, laser, etc.

More to follow as we continue the journey to reengineer the ABHP Part II exam. Your comments and suggestions are always welcomed. Please send them to efmaher@dukeengineering.com.