

General Outline of Cognitive Exam (Nuclear Medical Physics) Updated 5/2011

General Information

Approximately 30% of the material on the examination is core nuclear medicine physics, technology and safety. The rest is taken from recent advances in the field.

Length and Structure

The exam is approximately 100 questions in length. All questions are multiple-choice questions. Most have four possible answers. A standard calculator is available but no complex calculations are required.

Clinical Procedures

Candidates should have a general knowledge of common diagnostic and therapeutic nuclear medicine procedures.

The following items may be used to generate content for the exam.

Reports and Documents

AAPM Task Group 108: PET and PET/CT Shielding Requirements

NCRP Report No. 134: Operational Radiation Safety Training

NCRP Report No. 160: Ionizing Radiation Exposure of the Population of the United States

NCRP Report No. 138: Management of Terrorist Events Involving Radioactive Material

NCRP Report No. 147: Structural Shielding Design for Medical Imaging Facilities BEIR VII

NRC Regulations and guidelines relevant to nuclear medicine

ACR Nuclear Medicine Practice Guidelines and Technical Standards for Nuclear Medicine

MIRD Dose Estimate Report No. 19: Radiation Absorbed Dose Estimates from ^{18}F -FDG

Protocols and Testing Procedures

ACR CT Accreditation

ACR SPECT Accreditation

ACR PET Accreditation

NEMA Standards Publication NU 2-2007 Performance Measurements of Positron Emission Tomographs

Performance Measurements of Scintillation Cameras Using NEMA NU 1-2007 Standard