1. Record Nr. UNICAMPANIAVAN00055048

Autore	Corduneanu, Costantin
Titolo	Principles of differential and integral equations / C. Corduneanu
Pubbl/distr/stampa	New York, : Chelsea, 1977
ISBN	08-284-0295-7 978-08-284-0295-8
Edizione	[2. ed]
Descrizione fisica	XII, 205 p. ; 24 cm
Soggetti	34-XX - Ordinary differential equations [MSC 2020] 45-XX - Integral equations [MSC 2020]
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910631100703321

Autore	Tandon Pankaj
Titolo	Radiation Safety Guide for Nuclear Medicine Professionals / / by Pankaj Tandon, Dibya Prakash, Subhash Chand Kheruka, Nagesh N Bhat
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2022
ISBN	981-19-4518-7
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (371 pages)
Collana	Medicine Series
Disciplina	616.07570289
Soggetti	Nuclear medicine Radiology Radiation dosimetry Nuclear Medicine Radiation Dosimetry and Protection
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Nota di contenuto	Basics of Radiation Physics -- Radiation Quantities and Units -- Interaction of Radiation with Matter -- Working mechanism of Radiation Detectors used in NM -- Radiation Protection Standards in relation to ICRP recommendations -- Radiation Hazards Evaluation and Control -- Occupational and Public Exposure in Nuclear Medicine -- Biological Bases of Radiation Protection -- Planning of Nuclear Medicine facilities & including Shielding Calculations -- Planning & Design of High Dose Therapy Facility -- Planning & Design of Medical Cyclotron Facility -- Radiation Safety consideration during Radiopharmaceutical preparation -- NEMA and Routine Quality Control of SPECT & SPECT-CT -- NEMA and Routine Quality control of PET-CT -- Personnel Monitoring & Radiation Protection Survey in Nuclear Medicine -- Radiological Safety Consideration in Nuclear Medicine -- Radiation Emergencies and its Preparedness -- Radioactive Waste Disposal including disused radioactive sources -- Internal Dosimetry -- CT Dosimetry -- Transport of Radioactive Material -- Legislation and Role of National Regulatory Authority in Nuclear Medicine -- International Scenario in Nuclear Medicine Regulations -- MCQs in in Nuclear Medicine.
Sommario/riassunto	The book covers all the radiation safety aspects while working with unsealed radionuclides. Radiation safety plays a significant role in routine nuclear medicine practices and is necessary to protect occupational workers, patients, members of the general public and the environment. A fair knowledge of radiation safety is expected from all nuclear medicine professionals. Chapters include basics of radiation physics, biological bases of radiation protection, planning and design of nuclear medicine facilities, cyclotron and high dose therapy facilities, radiation safety considerations in nuclear medicine, cyclotron while preparing radiopharmaceuticals. It also includes the working mechanism of radiation detectors, quality assurance of positron emission tomography (PET) and gamma camera, including single photon emission computed tomography (SPECT), emergency preparedness plan, nuclear medicine and CT dosimetry, transport regulations, the role of national regulatory authorities and radioactive waste management. The last chapter provides probable model questions asked in the radiological safety officer certification examination and includes 250 multiple-choice questions (MCQs), 100 true or false, 60 fill in the blanks, and 40 match the following questions. The book is written in a simple language for a better understanding of the occupational workers of any grade. It serves as reference material for nuclear medicine professionals on radiation safety, related to planning, quality assurance, dosimetry and various regulations pertaining to nuclear medicine. It is a ready reckoner for the students pursuing a degree/diploma in nuclear medicine and preparing for certification courses in radiation safety to understand the subject matter along with options to attempt practice questions.