

Program	Institute
M.Sc. Nuclear Medicine Technology (NMT)	Manipal College of Health Professions (MCHP), Manipal

Department Test (DT) 2022 Details

- Test Duration: 60 minutes
- Total Questions: 60 MCQs
 - Human Anatomy & Physiology (10 Qs), Cell Biology & Biochemistry (10 Qs), Basic Mathematics in Nuclear Medicine (10 Qs), Physics in Nuclear Medicine (10 Qs), Radiochemistry and Radiopharmacy (10 Qs) Nuclear Medicine Instrumentation and Imaging (10 Qs)
- Max Marks: 60
- Marking Scheme: **No Negative marking**
- Schedule & Mode: Refer www.manipal.edu/dt for updates

HUMAN ANATOMY AND PHYSIOLOGY

Endocrine and Nervous system, Circulatory system, Excretory and reproductive system, Respiratory system, Digestive system, Musculoskeletal system

CELL BIOLOGY AND BIOCHEMISTRY

Structure and functions of cell and cellular organelles, Cell cycle, Cell signalling and cell death, Immunology, Enzymes, Carbohydrates and glycobiology, Bioenergetics.

BASIC MATHEMATICS IN NUCLEAR MEDICINE

Trigonometry & functions, Limits & derivatives, Graphic representation, Pre-algebra, basic statistics, and algebra skills.

PHYSICS IN NUCLEAR MEDICINE

Atoms and atomic models, Nuclear radiations and their properties, Radioactivity, decay equations, Units of radioactivity and half-life, Interaction of different ionizing radiations with matter, Gas filled detectors, Scintillation detectors.

RADIOCHEMISTRY AND RADIOPHARMACEUTICALS

Production of Radionuclide (Nuclear Reactor, Cyclotron, Radionuclide generators), Radiopharmaceuticals their ideal characteristics, Tc-99m labelled radiopharmaceuticals, Chromatography, Methods of sterilization.

NUCLEAR MEDICINE INSTRUMENTATION AND IMAGING

Gamma Camera, SPECT, PET principle and working, Hybrid Imaging Modalities principle and working, Nuclear Medicine imaging procedures.

♣ Best of Luck ♣

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