

Appendix 1
Tata Memorial Hospital
Homi Bhabha National Institute Deemed University

Syllabus for MSc (Nuclear Medicine & Molecular Imaging Technology) entrance test

Basic physics	Atomic structure Radioactivity and radioactive decay and X-rays Electricity, Electromagnetism and Electronics
Basic chemistry	Periodic table Chemical element, compound & chemical bonding Chemical reaction, Organic chemistry
Basic mathematics and statistics	Quadratic Expressions Matrices Calculus Probability Random Variables and Distributions Compartmental analysis Counting statistic Statistical technique used in medical sciences
Basic computer	Number system & Fundamentals of computer hardware Basics of computer operating system Basics of software programming Networking
Basic biology	Structure of Cell DNA, RNA and Protein Enzymes Vitamins Cell cycle Tissue, organ and organ system Immunology
Basic Human anatomy and physiology	anatomy and physiology of: Musculoskeletal system Cardiovascular system Lymphatic system Respiratory system Gastrointestinal system Hepatobiliary system Genitourinary system Nervous system Endocrine system Receptor systems
Nuclear Medicine	Basics of Nuclear Medicine Basics of radiation safety Basics of Nuclear medicine Instrumentation

