MANGALORE UNIVERSITY

Department of Physics

MSc Physics

PHP 512: NUCLEAR PHYSICS – PRACTICALS I

Course outcome

CO1 Understand the random nature of the radioactive decay.

CO2 Verify the Z dependence on the absorption of beta rays.

CO3 Find the end point energy of beta particles by feather analysis.

CO4 Learn energy calibration and resolution of GRS.

CO5 Understand the attenuation of gamma rays by different materials.

CO6 Verify the inverse square law of radiation.

1. Random nature of radioactive decay
2. Z dependence on the absorption of beta rays
3. End point energy of beta particles - Feather analysis
4. Energy calibration and resolution of GRS
5. Attenuation of gamma rays
6. Photoelectric absorption cross secton
7. Verification of inverse square law
8. Efficiency of alpha counting system
9. Rest mass energy of electron