



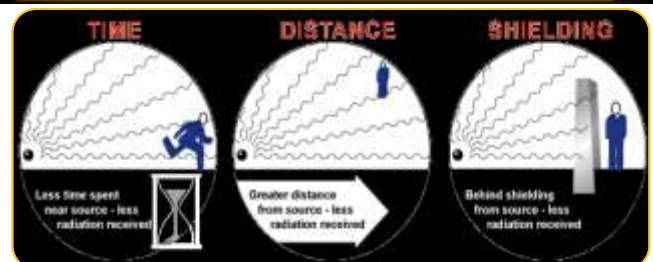
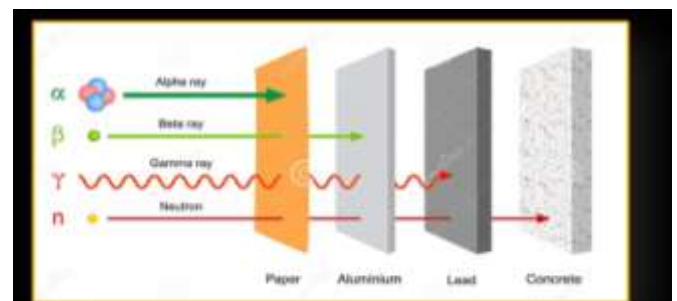
Radiation Protection

LECTURE SIX

Radiation protection rules (Solutions to the Problems)

Asst. prof. Dr Forat Hamzah

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LECTURE SIX : Radiation protection rules

Introduction

Fundamental to radiation protection is the avoidance or reduction of dose using the simple protective measures of time, distance and shielding. The duration of exposure should be limited to that necessary, the distance from the source of radiation should be maximized, and the source shielded wherever possible.

Radiation Protection

It is the science and practice of protecting people and the environment from the harmful effects of ionizing radiation.

Method of Radiation Protection

The three basic methods used to reduce the risk of external radiation are:

One : Time (limiting time)

Two : Distance

Three : Shielding

Good radiation protection practices require optimization of these fundamental techniques.

▪ ONE : Time (Limiting Time)

This represent the **amount of radiation that accumulates (pile up) in an individual (body)** , which depend on how long the body stays in the radiation field.

➤ **Dose (mrem) = Dose Rate (mrem/hr) x Time (hr)** ----- (1)

Therefore, to limit a person's dose, one can restrict the time spent in the area. How long