

## THE PHYSICS DEPARTMENT 2025

### CONTINUOUS ASSESSMENT

#### S.4 PHYSICS

#### TOPIC: ATOMIC MODELS

**Time: 1 hour**

Attempt **all** Items in this paper

#### Item. 1

Most of the referral hospitals in Uganda have always had challenges with diagnosis and treatment of certain sicknesses. So the government intends to provide X – ray machines to Health centres IV in the country to improve diagnosis and treatment at the centres. The community members have been threatened about the improper ways of using these X – ray machines. Some health works in these Health centres IV are also less informed on how these X – rays are produced. You have been invited in one of the Community Health conference meeting.

#### Task:

As a student of physics;

- (a). Educate the community on the threats and the uses of the government's intention to these Healthy Centres IV.
- (b). Explain to the health works how these X – rays can be produced.

#### Item. 2

In order to meet vision 2040, the government of Uganda has embarked on the improvement in technology and agriculture. In this, most of the Atomic physicists are devising means to control the states of individual atoms basing on atomic theories of different Philosophers as a contribution to the above cause. Your brother excelled in A' level results and is given a scholarship to study as an Atomic physicist. He has less knowledge about the existence of atoms, and how important it is to know about the atom existence.

#### Task;

As a student of Physics, help your brother solve his problem as is the scenario.

**END**