

**O-LEVEL PHYSICS SEMINAR SLATED FOR SUNDAY 23<sup>RD</sup>**  
**JUNE 2024 AT ST JOSEPH OF NAZARETH HIGH SCHOOL**  
**KAVULE-KATENDE**

**PHYSICS 535/1**

**CONSTRUCT:** APPRECIATES PHYSICS IN EVERY DAY LIFE

**ALLOCATED ITEM:**

**PARTNER SCHOOL (S):** **ST. BENEDICTS S.S -BUWAMA**

**Element of Construct:** Understands how waves are generated, propagated and their application in every day life.

**INSTRUCTIONS TO SEMI CANDIDATES & CANDIDATES**

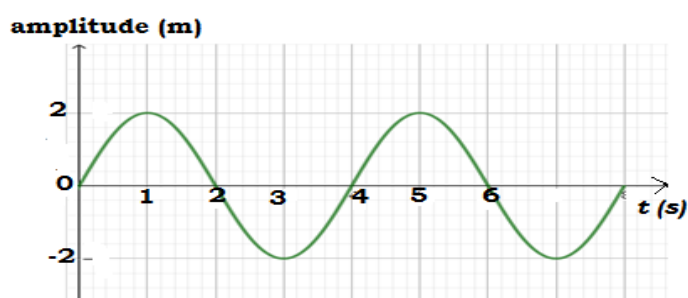
- *In groups, discuss the following item exhaustively, harmonise amongst your groups and prepare to present it on the D-day.*

**Item 2**

A war erupted in a certain mountainous areas surrounded by small water bodies where soldiers only communicated by throwing a stone in water to alert their colleagues of danger ahead. Instead, this alerted their enemies. One of the soldiers had small sizable plane mirrors and torn paper box in his bag. Their leader sent spies to peep behind hills to see if the enemies were hiding there but many were captured and killed. They totally lacked knowledge on how to solve this problem. The enemy troops had a radio call that was used for communication and wave forms of wave length were produced on the receiver's computer clearly indicating the amplitude, period and time taken for the wave to reach the receiver at the headquarter. One afternoon, it threatened to rain and bright colours of different kind spread in the skies. This scared the soldiers even more.

**Hint;**

**A graph obtained from the receiver's computer**



## Task:

As a physics student, help the soldiers to;

- (a) Understand why the throwing of the stone in water always alerted their enemies
- (b) Know the best way they could reduce the rate at which their spies were being killed and captured.
- (c) Understand the strange appearance of the skies that sent them to hide outs.
- (d) Determine the frequency at which the waves reached the receiver at the home base of the army.

**END**

## **SUGGESTED PROGRAMME FOR THE DAY**

<b>TIME</b>	<b>ACTIVITY</b>	<b>OFFICER</b>
<b>8:30-9:30</b>	<b>Writing C.A.I &amp; filling checklists for A.O.I, S.A &amp; prjts.</b>	<b>National facilitator-1</b>
<b>9:30-10:30</b>	<b>Theory -overview</b>	<b>P.1 facilitator -2</b>
<b>10:30-11:30</b>	<b>Practical- over view</b>	<b>P.2/3 facilitator-3</b>
<b>11:30-01:30</b>	<b>Item guided discussion</b>	<b>Candidates as guided by facilitators</b>
<b>1:30-: 2:20</b>	<b>Lunch</b>	<ul style="list-style-type: none"><li>• <b>Trs. &amp; facilitators in staff dinning</b></li><li>• <b>Learners have their packed lunch</b></li></ul>
<b>2:20-2:50</b>	<b>Hi shule ICT</b>	<b>Hi shule delegate</b>
<b>2:50-3:50</b>	<b>Practical items</b>	<b>Facilitator for practicals-4</b>
<b>3:50-5:00</b>	<b>Item discussion</b>	<b>Candidates</b>
<b>5:00</b>	<b>Departure</b>	