



**UGANDA NATIONAL EXAMINATIONS BOARD**  
**CONTINUOUS ASSESSMENT OBSERVATION CHECKLIST**

**535 PHYSICS**

**Senior 4, Term 1**

**Centre/CA No:** ..... **Year:** .....

**Learner's Name:** ..... **Learner ID:** .....

**Instructions to the facilitator:**

1. This observation checklist contains **one** competency, which **must** be assessed by the end of this term.
2. Please **tick** against the indicator(s) the learner has exhibited at every level assessed.
3. Record the **number of indicators observed** in the boxes provided at the end of each level for **Subject Competency (SC)** and **Generic Skill (GS)**.
4. Indicate **N/A** if the learner has not been assessed for a particular level(s).

**Theme:**

Electricity

**Topic:**

Voltage, Resistance, and Ohm's Law.

**Learning Outcome(s):**

Understand electrical resistance, how it is measured, its relationship to current and voltage, and the factors that affect it.

**Subject Competency (SC):**

Carries out investigations to determine the electrical resistance of conductors.

**Generic Skill (GS):**

Cooperation & self-directed learning.

**Learning Domain:**

Psychomotor.

**Level 1: Imitation**

**Subject Competency (SC): Imitating the teacher/peer/video clip/laboratory technician, etc., carrying out an investigation to determine the electrical resistance of a conductor, the learner:**

- ☐ States the aim of the experiment clearly, using relevant words.
- ☐ Identifies the independent variable correctly.
- ☐ Identifies the dependent variable correctly.

- ☐ Identifies the controlled variable correctly.
- ☐ States the hypothesis of the experiment clearly, using relevant words.
- ☐ Lists all the relevant apparatus/materials required for the experiment.
- ☐ Draws/makes correct experimental setup.
- ☐ Writes the procedure of the experiment coherently/logically.
- ☐ Identifies and writes risks/errors or sources of errors in the experiment to be carried out.
- ☐ States the precaution(s)/mitigation(s) to the identified error(s).
- ☐ Carries out the experiment/investigation, following the stated procedure.
- ☐ Presents/records data in a logical format.
- ☐ Records data accurately, based on the instrument used and the required range.
- ☐ Carries out data analysis using an appropriate method(s).
- ☐ Interprets data correctly.
- ☐ Draws an appropriate conclusion, based on the interpretation made.
- ☐ Gives appropriate advice/recommendation(s), based on the findings.

**Generic Skill (GS): Imitating the teacher/peer/video clip/laboratory technician, etc., demonstrate Cooperation & self-directed learning skills in carrying out an investigation to determine the electrical resistance of a conductor, the learner:**

- ☐ Works effectively in diverse teams while investigating electrical resistance.
- ☐ Interacts effectively with others while investigating electrical resistance
- ☐ Takes responsibility for own learning while investigating electrical resistance
- ☐ Works independently with persistence while investigating electrical resistance.
- ☐ Manages goals and time while investigating electrical resistance.

Level 1 Indicators	
SC	GS

## Level 2: Manipulation

**Subject Competency (SC): Following instructions from the teacher, video clip, peer, manual, etc., to carry out an investigation to determine the electrical resistance of a conductor, the learner:**

- ☐ States the aim of the experiment clearly, using relevant words.
- ☐ Identifies the independent variable correctly.
- ☐ Identifies the dependent variable correctly.
- ☐ Identifies the controlled variable correctly.
- ☐ States the hypothesis of the experiment clearly, using relevant words.
- ☐ Lists all the relevant apparatus/materials required for the experiment.
- ☐ Draws/makes correct experimental setup.

- ☐ Writes the procedure of the experiment coherently/logically.
- ☐ Identifies and writes risks/errors or sources of errors in the experiment to be carried out.
- ☐ States the precaution(s)/mitigation(s) to the identified error(s).
- ☐ Carries out the experiment/investigation, following the stated procedure.
- ☐ Presents/records data in a logical format.
- ☐ Records data accurately, based on the instrument used and the required range.
- ☐ Carries out data analysis using an appropriate method(s).
- ☐ Interprets data correctly.
- ☐ Draws an appropriate conclusion, based on the interpretation made.
- ☐ Gives appropriate advice/recommendation(s), based on the findings.

**Generic Skill (GS): Following instructions from the teacher, video clip, peer, manual, etc., in demonstrating cooperation & self-directed learning while carrying out an investigation to determine the electrical resistance of a conductor, the learner:**

- ☐ Works effectively in diverse teams while investigating electrical resistance.
- ☐ Interacts effectively with others while investigating electrical resistance
- ☐ Takes responsibility for own learning while investigating electrical resistance
- ☐ Works independently with persistence while investigating electrical resistance.
- ☐ Manages goals and time while investigating electrical resistance.

Level 2 Indicators	
SC	GS

### Level 3: Precision

**Subject Competency (SC): Carrying out an investigation to determine the electrical resistance of a conductor independently, with minimal errors, the learner:**

- ☐ States the aim of the experiment clearly, using relevant words.
- ☐ Identifies the independent variable correctly.
- ☐ Identifies the dependent variable correctly.
- ☐ Identifies the controlled variable correctly.
- ☐ States the hypothesis of the experiment clearly, using relevant words.
- ☐ Lists all the relevant apparatus/materials required for the experiment.
- ☐ Draws/makes correct experimental setup.
- ☐ Writes the procedure of the experiment coherently/logically.
- ☐ Identifies and writes risks/errors or sources of errors in the experiment to be carried out.
- ☐ States the precaution(s)/mitigation(s) to the identified error(s).
- ☐ Carries out the experiment/investigation, following the stated procedure.

- ☐ Presents/records data in a logical format.
- ☐ Records data accurately, based on the instrument used and the required range.
- ☐ Carries out data analysis using an appropriate method(s).
- ☐ Interprets data correctly.
- ☐ Draws an appropriate conclusion, based on the interpretation made.
- ☐ Gives appropriate advice/recommendation(s), based on the findings.

**Generic Skill (GS): Demonstrating cooperation & self-directed learning independently while carrying out an investigation to determine the electrical resistance of a conductor, the learner:**

- ☐ Works effectively in diverse teams while investigating electrical resistance.
- ☐ Interacts effectively with others while investigating electrical resistance
- ☐ Takes responsibility for own learning while investigating electrical resistance
- ☐ Works independently with persistence while investigating electrical resistance.
- ☐ Manages goals and time while investigating electrical resistance.

Level 3 Indicators	
SC	GS

**Level 4: Articulation**

**Subject Competency (SC): Carrying out an investigation to determine the electrical resistance of a conductor, correctly and innovatively, the learner:**

- ☐ States the aim of the experiment clearly, using relevant words.
- ☐ Identifies the independent variable correctly.
- ☐ Identifies the dependent variable correctly.
- ☐ Identifies the controlled variable correctly.
- ☐ States the hypothesis of the experiment clearly, using relevant words.
- ☐ Lists all the relevant apparatus/materials required for the experiment.
- ☐ Draws/makes correct experimental setup.
- ☐ Writes the procedure of the experiment coherently/logically.
- ☐ Identifies and writes risks/errors or sources of errors in the experiment to be carried out.
- ☐ States the precaution(s)/mitigation(s) to the identified error(s).
- ☐ Carries out the experiment/investigation, following the stated procedure.
- ☐ Presents/records data in a logical format.
- ☐ Records data accurately, based on the instrument used and the required range.
- ☐ Carries out data analysis using an appropriate method(s).
- ☐ Interprets data correctly.
- ☐ Draws an appropriate conclusion, based on the interpretation made.
- ☐ Gives appropriate advice/recommendation(s), based on the findings.

**Generic Skill (GS): Demonstrating cooperation & self-directed learning correctly and innovatively while carrying out an investigation to determine the electrical resistance of a conductor, the learner:**

- ☐ Works effectively in diverse teams while investigating electrical resistance.
- ☐ Interacts effectively with others while investigating electrical resistance
- ☐ Takes responsibility for own learning while investigating electrical resistance
- ☐ Works independently with persistence while investigating electrical resistance.
- ☐ Manages goals and time while investigating electrical resistance.

Level 4 Indicators	
SC	GS

### Level 5: Naturalisation

**Subject Competency (SC): Carrying out an investigation to determine the electrical resistance of a conductor, with ease, the learner:**

- ☐ States the aim of the experiment clearly, using relevant words.
- ☐ Identifies the independent variable correctly.
- ☐ Identifies the dependent variable correctly.
- ☐ Identifies the controlled variable correctly.
- ☐ States the hypothesis of the experiment clearly, using relevant words.
- ☐ Lists all the relevant apparatus/materials required for the experiment.
- ☐ Draws/makes correct experimental setup.
- ☐ Writes the procedure of the experiment coherently/logically.
- ☐ Identifies and writes risks/errors or sources of errors in the experiment to be carried out.
- ☐ States the precaution(s)/mitigation(s) to the identified error(s).
- ☐ Carries out the experiment/investigation, following the stated procedure.
- ☐ Presents/records data in a logical format.
- ☐ Records data accurately, based on the instrument used and the required range.
- ☐ Carries out data analysis using an appropriate method(s).
- ☐ Interprets data correctly.
- ☐ Draws an appropriate conclusion, based on the interpretation made.
- ☐ Gives appropriate advice/recommendation(s), based on the findings.

**Generic Skill (GS): Demonstrating cooperation & self-directed learning, with ease, while carrying out an investigation to determine the electrical resistance of a conductor, the learner:**

- ☐ Works effectively in diverse teams while investigating electrical resistance.

- ☐ Interacts effectively with others while investigating electrical resistance
- ☐ Takes responsibility for own learning while investigating electrical resistance
- ☐ Works independently with persistence while investigating electrical resistance.
- ☐ Manages goals and time while investigating electrical resistance.

Level 5 Indicators	
SC	GS