



KWAZULU-NATAL PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

**GENERAL EDUCATION AND
TRAINING**

GRADE 6

NATURAL SCIENCES AND TECHNOLOGY

PLC FINAL TEST

AMENDED MARKING GUIDELINES

2025

Marks: 40

Time: 70 minutes

NB: These marking guidelines consist of 3 pages excluding cover page.

SECTION A - (20 marks)

Question 1

1.1	D ✓	(1)
1.2	B ✓	(1)
1.3	C ✓	(1)
1.4	C ✓	(1)
1.5	A ✓	(1)
1.6	D ✓	(1)
1.7	B ✓	(1)
1.8	B ✓	(1)
1.9	D ✓	(1)
1.10	A ✓	(1)
		[10]

Question 2

2.1	D ✓	(1)
2.2	E ✓	(1)
2.3	A ✓	(1)
2.4	B ✓	(1)
2.5	C ✓	(1)
		[5]

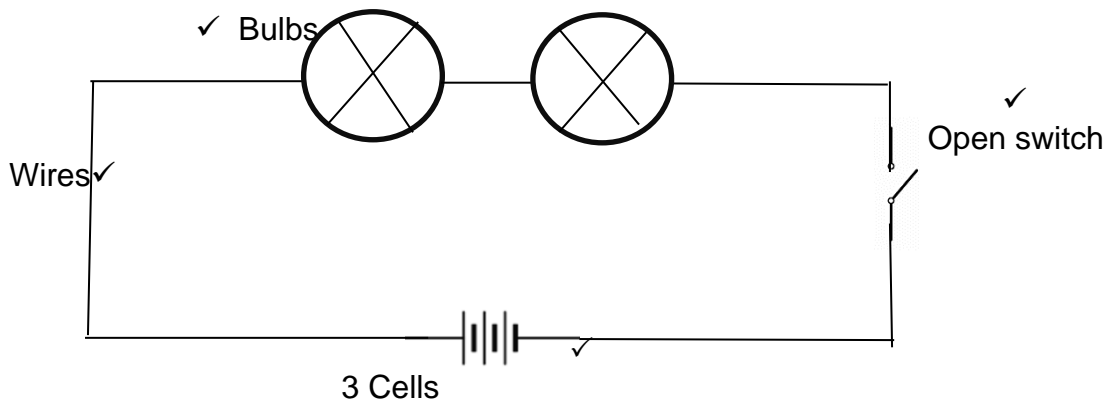
Question 3

3.1.	Month ✓	(1)
3.2.	Revolution ✓	(1)
3.3.	Orbit ✓	(1)
3.4.	Year ✓	(1)
3.5.	Telescope ✓	(1)
		[5]

SECTION B - (20 marks)

Question 4

4.1



(4)

4.2 Controls the flow of electricity in a circuit. ✓

(1)

4.3 The other bulb will not glow because of a break in this circuit circuit/open switch, or nothing will happen in this circuit. ✓

(1)

[6]

Question 5

5.1 Fossil fuel ✓

(1)

5.2 12% ✓

(1)

5.3 renewable energy ✓

(1)

5.4 Environmental pollution: Burning fossil fuels releases harmful gases, contributing to climate change and poor air quality. ✓

Or Fossil fuels are limited; relying on them could lead to energy shortages as reserves decrease.

(Accept any answer that provides proper reasoning)

(1)

5.5

- It is environmentally friendly ✓
- it saves electricity cost because it uses energy from the sun ✓

Or

- it is renewable and sustainable
- it reduces pollution and greenhouse gas emissions
- it helps during load shedding
- it allows household and industries to generate and use more of their own energy without restrictions
- it cannot be used up, etc.

(Accept any relevant/correct answer)

(2)

Question 6

- 6.1 Independent variable is the different materials being tested (copper wire, plastic straw, metal spoon, rubber band, and wood stick). ✓ (1)
- 6.2 Dependent variable is whether the light bulb lights up or not (or the flow of electricity). ✓ (1)
- 6.3 The same battery voltage ✓ (or the same battery)
or the same wires,
or the same light bulb.
or same arrangement/connection of the circuit (1)
- 6.4 The learners use the same battery and light bulb for each test to ensure a fair test, so the results are comparable. ✓ (1)
- 6.5 The copper wire will allow the electricity to flow and light up the bulb because copper is a good conductor of electricity ✓ (or metal is a good conductor). (1)

[5]

Question 7

7.1.

- Collect samples of rock or soil. ✓
 - Take photographs of environment, soil, rocks etc. ✓
- Or**
- Take pictures and record information back to the Earth.
 - To explore the surface of the Mars.
 - To measure atmospheric conditions. (2)

7.2.

- It allows scientists to conduct test, solve problems of land, water and minerals scarcity. ✓
- Or**
- It allows experiments on soil and rocks.
 - It assists in medical research.
 - Explore dangerous distant or harsh environments without risking human life
 - Helps in data collection (*Accept any correct/relevant responses*) (1)

7.3.

- The atmosphere and environment are not conducive for people to be there. ✓
- Or**
- There is not enough oxygen to support life on Mars
 - There is no water on Mars.
 - Environment is too harsh for humans.
 - Mars is too dusty.
 - It is risky. (*Accept any relevant correct answer*) (1)

[4]

Total Marks: 40