education

Department of
Education
FREE STATE PROVINCE

GRADE 6

NST

CONTROLLED TEST

NOVEMBER 2024

TIME: 1½ HOURS

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GRADE 6 **NST NOVEMBER 2024**

TIME: 1½ HOURS **MEMORANDUM** **MARKS: 50**

SECTION A

QUESTION 1

1.1

1.1.1 B ✓

1.1.2 C ✓

1.1.3 D ✓

1.1.4 D✓

1.1.5 D✓

1.1.6 B ✓

1.1.7 A ✓

1.1.8 B ✓

1.1.9 B ✓

1.1.10 D ✓ **[10]**

2.1

2.2.1 E ✓

2.2.2 D ✓

2.2.3 B ✓

2.2.4 C ✓

2.2.5 A ✓ **[5]**

SECTION A TOTAL: [15]

SECTION B

QUESTION 3

3.1

3.1.1 Oen ✓ (1)

3..1.2 Closed✓ (1)

3.1.3 No ✓ **(**1)

3.1.4 Yes✓ **(**1)

3.1. 5 No ✓ (1)

3.1. 6 Yes ✓ (1)

[6]

3.2

3.2.1 The cell acts as the power source ✓

3.2.2 The bulb is the load in the circuit which uses the electrical energy to produce light and sometimes heat ✓ **(**Any other correct relevant answer) (1)

3.3.1 Conductors are materials that allow electric current to flow through them ✓✓ (2)

3.3.2 Insulaters are materials that do not allow electric current to pass through them✓✓(2)

3.4 Insulators like plastic have important functions like insulating wires or protection from electrical shock. ✓✓ **(**Any other correct relevant answer) (2)

[5]

QUESTION 4

4.1.1 Electric stoves and geysers are high-power appliances that require more energy to generate heat ✓✓ **(**Any other correct relevant answer) (2)

4.1.2. Use alternative sources of energy for the Geyser and the Stove e.g. ✓ Gas stove and a solar Geyser✓ (2)

4.1.3. Solar energy ✓ (1)

4.2.1 The electrical wire is exposed. ✓✓ (2)

4.2.1 Cover the exposed part with insulation tape. ✓ (1)

(Any other relevant and correct answer) **[8]**

QUESTION 5

5.1 A system is a set of interconnected parts or components working together √ (1)

5.2 Electricity → Radio → sound
(Input) →process → (output)

(3)

QUESTION 6

6.1.1. Telescopes are used to see the objects in the sky that are far away clearly to measure how far they are ✓ (1)

6.1.2. It can see finer details in the universe, SKA can image huge areas of the sky simultaneously. ✓ (1)

(Any other correct response).

6.1.3. Rover✓ (1)

6.1.4. The moon rover is designed to handle the Moon's surface while the Mars rover is built to operate in Mars 'environment which includes dust storms. ✓✓ (2)

(Any other correct responses**).**

6.1.5. They both use battery power✓ (1)

6.2. The Moon's movement around the Earth is called its orbit. ✓ (1)

[7]

SECTION A TOTAL: [15]

SECTION A TOTAL: [35]

GRAND TOTAL: [50]