

NS GRADE 9 NOVEMBER 2017 FINAL EXAMINATION ERRATA

English Question paper

6.2.5 Which circuit (A or B) illustrates how in a string of Christmas lights are connected, if it is observed that if one of the bulbs does **NOT** make contact, the whole string dies out.

Memo's corrections

Afrikaans Memo

2.2 Elektriese stroom (stroomsterkte kan aanvaar word)

4.1.2 B sal aangetrek word, want B bevat yster wat magtenies is.

OF

D sal aangetrek word, want die allooi bevat nikkel wat magneties is.

4.2 Die pyltjies in die magneetveld moet WEG van noord NA suid wys. (Foutief by suidpool.)

4.3 Is vier (4) punte

5.1.4 **Ook:** Weerstand is direk eweredig aan die lengte van die resistor.

5.3 Is drie (3) punte.

6.1.2 Indien skakelaar S_2 oopgemaak word, dan neem die totale weerstand toe✓ en die totale stroom af. ✓ Dus sal die stroom deur gloeilamp A kleiner as 6A wees. ✓

Dus:

Aanvaar enige antwoord kleiner as 6A,✓ en gee 2 punte vir die rede.✓✓

6.4.1 Totale energie verbruik = **2 kW**✓ × 0.033 uur✓
= 0,066kW✓ (3)

6.4.2 Koste = drywinggradering × koste × prys per eenheid✓
= **2 kW** × 0,033 uur × 120c✓
= 7,92
= 8.00c ✓ (R0,80 or 8c)

6.2.5 A (serie stroombaam)

English Memo

1.5 Accept B or D

2.1 Accept forces or contact forces

2.2 Electric current (current strength can be accepted)

4.1.2 B will be attracted because B contains iron which is magnetic.

OR

D will be attracted because the alloy contains nickel which is magnetic.

4.2 The arrows in the magnetic field must point AWAY from north and TOWARDS south. (Arrow direction at south pole is incorrect.)

4.3 Is four (4) marks

5.1.4 **Also:** resistance is directly proportional to the length of the resistor.

5.3 Is three (3) marks.

6.1.2 If switch S_2 is opened, the total resistance will increase✓ and the total current will decrease. ✓ Thus the current through the bulb will be less than 6 A.✓

Thus:

Accept any answer smaller/less than 6A✓ and award 2 marks for the reason.✓✓

6.4.1 Total energy consumption = **2 kW**✓ × 0,033 h✓

$$= 0.066 \text{ kWh}✓ \quad (3)$$

6.4.2 Cost = Power rating x time x unit price✓

$$= \mathbf{2 \text{ kW}} \times 0,033 \times 120\text{c}✓$$

$$= 7.92$$

$$= 8.00\text{c} \quad ✓ \text{ (R0,80 of 8c)}$$

6.2.5 A (series circuit)